

STATE REVIEW FRAMEWORK

Missouri

Clean Air Act Implementation in Federal Fiscal Year 2013

**U.S. Environmental Protection Agency
Region 7, Kansas City**

**Final Report
September 12, 2014**

Executive Summary

Introduction

EPA Region 7 (Region 7) enforcement staff conducted a Clean Air Act oversight review of the Missouri Department of Natural Resources (MDNR) enforcement and compliance program using the State Review Framework (SRF) guidance on June 9 – 12, 2014.

EPA bases SRF findings on data and file review metrics, and conversations with program management and staff. EPA will track recommended actions from the review in the SRF Tracker and publish reports and recommendations on EPA's ECHO web site.

Areas of Strong Performance

- **Finding 2-1.** FCE coverage of majors and SM-80s, as well as the review of Title V compliance certifications were all near the national average.
- **Finding 3-1.** Accuracy of compliance and HPV determinations were at or near the national goal of 100%.
- **Finding 4-1.** All formal enforcement responses reviewed included language requiring the facility return to compliance.
- **Finding 5-1.** Documentation of penalty collection was found in most enforcement files reviewed.

Most Significant CAA Stationary Source Program Issues¹

The following are the top-priority issues affecting the state program's performance:

- **Finding 1-2.** The review revealed issues with timely data entry into AFS.
- **Finding 2-2.** The quality and content of inspection reports varied greatly.
- **Finding 4-2.** Timely action was taken to address HPVs in one of the four files reviewed.

¹ EPA's "National Strategy for Improving Oversight of State Enforcement Performance" identifies the following as significant recurrent issues: "Widespread and persistent data inaccuracy and incompleteness, which make it hard to identify when serious problems exist or to track state actions; routine failure of states to identify and report significant noncompliance; routine failure of states to take timely or appropriate enforcement actions to return violating facilities to compliance, potentially allowing pollution to continue unabated; failure of states to take appropriate penalty actions, which results in ineffective deterrence for noncompliance and an unlevel playing field for companies that do comply; use of enforcement orders to circumvent standards or to extend permits without appropriate notice and comment; and failure to inspect and enforce in some regulated sectors."

- **Finding 5-2.** MDNR does not have a formal penalty policy and did not adequately document penalty calculations.
- **Finding 5-3.** MDNR did not adequately document rationale for reducing the initial penalty.

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I. Background on the State Review Framework

The State Review Framework (SRF) is designed to ensure that EPA conducts nationally consistent oversight. It reviews the following local, state, and EPA compliance and enforcement programs:

- Clean Water Act National Pollutant Discharge Elimination System
- Clean Air Act Stationary Sources (Title V)
- Resource Conservation and Recovery Act Subtitle C

Reviews cover:

- **Data** — completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** — meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** — identification of violations, determination of significant noncompliance (SNC) for the CWA and RCRA programs and high priority violators (HPV) for the CAA program, and accuracy of compliance determinations
- **Enforcement** — timeliness and appropriateness, returning facilities to compliance
- **Penalties** — calculation including gravity and economic benefit components, assessment, and collection

EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

EPA builds consultation into the SRF to ensure that EPA and the state understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: FY2013

Key dates:

- SRF Kickoff letter mailed to MDNR: February 27, 2014
- Data metric analysis sent to MDNR: April 9, 2014
- File selection list sent to MDNR: April 9, 2014
- On-site file review conducted: June 9 – 12, 2014
- Draft report sent to MDNR: July 28, 2014
- Report finalized: September 12, 2014

State and EPA key contacts for review:

- Darcy Bybee, MDNR Air Pollution Control Program
- Russell Sullivan, MDNR Air Pollution Control Program
- Gary Bertram, EPA Region 7, lead
- Joe Terriquez, EPA Region 7
- Kevin Barthol, EPA Region 7 SRF Coordinator

III. SRF Findings

Findings represent EPA’s conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state’s last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue’s severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and EPA will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, EPA will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric’s SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- **Natl Avg:** The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- **State % or #:** The percentage, or if the metric is expressed as a whole number, the count.

Clean Air Act Findings

CAA Element 1 — Data						
Finding 1-1	Area for State Attention					
Summary	MDNR maintains the data in AFS. The review revealed minor inaccuracies in data entry.					
Explanation	21 of 31 files reviewed had complete and accurate data entered into AFS. The most common issue noted was a difference in the dates recorded on documents and those entered into AFS. Most dates differed by a few days. Two stack test observation reports and an FCE were found in the facility files and were not entered into AFS.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	2b Accurate MDR data in AFS	100%		21	31	67.7%
State response	The MDNR has evaluated our data transfer and entry processes. In 2013 we implemented a better process to track stack test observation reports which will lead to more timely data entry moving forward. In addition, we currently receive the majority of FCE reports electronically and are evaluating a process to transfer these reports electronically. Regarding data accuracy, we are training staff on the appropriate dates to use to track compliance and enforcement actions for consistency and accuracy.					
Recommendation	Region 7 recommends MDNR evaluate current data entry procedures with the goal of improving accuracy by reducing data entry errors (primarily event dates).					

CAA Element 1 — Data

Finding 1-2	Area for State Improvement					
Summary	MDNR maintains the data in AFS. The review revealed issues with timely data entry.					
Explanation	<p>Inability to timely report data into AFS is a function of the current MDNR procedures for receiving and entering data. The majority of inspections are conducted by the MDNR Regional Offices, as well as the issuance of informal enforcement actions. Inspection reports and informal enforcement actions are submitted to the MDNR main office monthly, which may result in data entry delays of 45 days or longer. Stack test data is typically entered once all activities associated with the stack test are complete and a response is provided to the facility. The delay in receiving inspection reports also impacts the timely reporting of formal enforcement activities.</p> <p>Data entry is conducted by one staff member whose time is split between the air and asbestos programs. Physical copies of the documents (inspection reports, enforcement documents, stack test observations, etc.) are provided to the data entry person, who reviews the documents and identifies the information to be recorded in AFS. A recent modification to the manner in which stack tests are recorded (now record one entry per emission unit instead of one entry per facility) has increased the time required to record data in AFS. Documents and actions tracked for timeliness are given priority and recorded in AFS before other actions.</p>					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	3a2 Untimely entry of HPV determinations	0		1		
	3b1 Timely reporting of compliance monitoring MDRs	100%	80.9%	128	660	19.4%
	3b2 Timely reporting of stack test dates and results	100%	75.4%	0	197	0%
	3b3 Timely reporting of enforcement MDRs	100%	68.7%	6	28	21.4%
	7b1 Violations reported per informal actions	100%	59.5%	0	18	0%
	7b3 Violations reported per HPV identified	100%	57.5%	0	1	0%
	10a Timely action taken to address HPVs	N/A	67.5%	1	4	25%

State response	<p>As a clarification, the inspection reports received from the regional offices are received very quickly upon completion of the action via an electronic data exchange process. The inspection reports from the Local Agencies are received on a monthly basis, and, as noted, sometimes up to 45 days from the completion of the inspection. This is due to the nature of the relationship between MDNR and the local agencies. In addition, the MDNR Compliance/Enforcement (C/E) Section experienced staffing shortages for asbestos duties during the SRF review period. These staffing shortages contributed to the delay in data entry for certain inspection reports. The C/E Section is currently fully staffed for asbestos activities and the Air Program is currently training additional staff to assist with data entry responsibilities under ICIS-AIR. With regard to timely reporting of stack test dates and results, as noted the C/E Section has reevaluated our procedure, which should lead to compliance with the timely reporting requirement for these metrics. As noted under Finding 1-1, the MDNR is evaluating the process for the electronic transfer of FCE data which will ultimately allow for more timely data entry.</p>
Recommendation	<p>Region 7 recommends MDNR evaluate current data entry procedures with the goal of improving speed by identifying opportunities to collect data from the Regional Offices and Local Government Agencies more efficiently so AFS data entry may occur in a timely manner. By December 31, 2014, MDNR should develop a process which will provide data entry staff the necessary information in a timely manner. MDNR should consider the use of a data entry form which may be provided electronically to data entry staff upon completion of reportable activities. EPA will consider this recommendation complete once EPA is satisfied that state action has addressed the data concern and the state is consistently entering data in a timely manner.</p>

CAA Element 2 — Inspections

Finding 2-1	Meets or Exceeds Expectations																								
Summary	FCE coverage of majors and SM-80s, as well as the review of Title V compliance certifications were all near the national average.																								
Explanation	<p>FCE coverage of majors was 85.1% (national average of 88.5%) and FCE coverage of SM-80s was 85.6% (national average of 93.3%). In addition to the scheduled inspections, the MDNR Regional Offices responded to 724 concerns/complaints during calendar year 2013.</p> <p>Review of Title V annual compliance certifications was above the national averages. At a minimum, MDNR inspects major sources every two years and synthetic minor sources every five years. However, MDNR’s goal is to visit every Title V source annually and every synthetic minor source every two years. This is accomplished by communicating and coordinating with the MDNR Regional Offices and local government offices on a frequent basis to ensure inspection targets are met.</p>																								
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>5a FCE coverage: majors and mega-sites</td> <td>100%</td> <td>88.5%</td> <td>200</td> <td>235</td> <td>85.1%</td> </tr> <tr> <td>5b FCE coverage: SM-80s</td> <td>100%</td> <td>93.3%</td> <td>155</td> <td>181</td> <td>85.6%</td> </tr> <tr> <td>5e Review of Title V annual compliance certifications</td> <td>100%</td> <td>81.3%</td> <td>232</td> <td>265</td> <td>87.5%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	5a FCE coverage: majors and mega-sites	100%	88.5%	200	235	85.1%	5b FCE coverage: SM-80s	100%	93.3%	155	181	85.6%	5e Review of Title V annual compliance certifications	100%	81.3%	232	265	87.5%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																				
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5e Review of Title V annual compliance certifications	100%	81.3%	232	265	87.5%																				
State response	The Air Program appreciates the acknowledgement of our successes in this Element.																								
Recommendation																									

CAA Element 2 — Inspections

Finding 2-2	Area for State Improvement						
Summary	Inspection reports do not consistently document all elements of a full compliance evaluation.						
Explanation	<p>The quality of inspection reports varied greatly and ranged from inspection forms simply stating the facility is “in compliance” to very well written narrative reports describing the facility requirements and inspector observations. The purpose of the inspection report is to document the inspector’s observations. The compliance determination should be independent of the inspection report.</p> <p>11 of the 25 reports reviewed did not provide an adequate description of activities conducted during the inspection, including records reviewed, observations, conversations and discussion of inspection findings.</p> <p>Many of the reports reviewed failed to provide sufficient documentation of facility compliance. In addition, the inspectors do not indicate in their reports whether they are conducting an FCE or PCE. 8 out of the 25 inspection reports reviewed failed to contain enough information to make a determination whether an FCE or PCE was conducted.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	6a Documentation of FCE elements		100%	N/A	14	25	56%
	6b Compliance monitoring reports reviewed that provide sufficient documentation to determine facility compliance		100%	N/A	17	25	68%
State response	<p>We appreciate the recommendation and agree. As noted, beginning in January 2014, there are additional reporting requirements in place for inspections that document noncompliance. These requirements were updated and are detailed within Section 3.6.1. of the Department’s Operations Manual (http://dnr.mo.gov/env/opsmanual/ch3sec6.htm). The additional reporting requirements include a narrative description of the facility and the inspection along with an Enforcement Action Request. The Compliance Manual, in both Section 3.6. (please see above link) and in the General Inspection Section (http://dnr.mo.gov/env/opsmanual/ch3sec1.htm) describes the type of information and processes to review during an inspection. A general statement of “in compliance” is not sufficient. We will work with the</p>						

	<p>Regional Offices to ensure that this level of documentation is present for all facility inspections. The C/E Section has already broached this subject with the Regional Offices during a monthly coordination call and will look for additional methods to communicate this with staff.</p> <p>During the SRF, Region 7 staff offered to attend a future monthly coordination call or to participate in the annual coordination meeting. We appreciate any assistance EPA can provide in communicating the importance of this level of documentation.</p>
Recommendation	<p>MDNR will develop a set of criteria for inspection reports. The criteria will address the deficiencies noted above to ensure every inspection report will clearly and concisely document the inspector's activities, observations and findings during the site visit. MDNR will assure that all elements of an FCE, as outlined in Section IX of the CAA CMS, are documented to ensure a full compliance evaluation was conducted at the site and not a partial compliance evaluation.</p> <p>MDNR developed inspection report criteria to address identified concerns raised during SRF Rounds 1 and 2. The inspection report criteria is currently being utilized for inspections where violations are identified, effective January 1, 2014. EPA recommends the criteria be utilized for all inspection reports. By December 31, 2014, EPA will review at least two inspection reports from each Regional Office. Review of the inspection reports will occur while EPA staff are present in the MDNR office. EPA will consider this recommendation complete once EPA is satisfied that state action has addressed the inspection documentation concern.</p>

CAA Element 3 — Violations

Finding 3-1	Meets or Exceeds Expectations					
Summary	Accuracy of compliance and HPV determinations were at or near the national goal of 100%.					
Explanation	24 of the 26 files reviewed appeared to have accurate compliance determinations.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	7a Accuracy of compliance determinations	100%	N/A	24	26	92.3%
	8c Accuracy of HPV determinations	100%	N/A	17	17	100%
State response	The Air Program appreciates EPA's acknowledgement of our success under this Element.					
Recommendation						

CAA Element 3 — Violations

Finding 3-2	Area for State Attention					
Summary	The MDNR discovery rate of HPVs is lower than the national average by a factor of ten.					
Explanation	The HPV discovery rate is lower than the national average. MDNR management discusses HPV cases and HPV identification with Region 7 staff during their scheduled monthly conference calls. No clear explanation of the low HPV discovery rate was determined during the review.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	8a HPV discovery rate at majors	N/A	4%	1	267	0.4%
State response	We will continue to evaluate and review violations to ensure compliance with the HPV policy and with any future updates to the policy. We appreciate Region 7's assistance during the monthly calls and as needed.					
Recommendation	MDNR should continue its efforts to utilize the HPV policy and monthly conference calls to identify HPVs at major sources.					

CAA Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations					
Summary	All formal enforcement responses reviewed included language requiring the facility return to compliance.					
Explanation	All formal enforcement settlement documents reviewed included a condition that required the facility to return to compliance. When practical, the return to compliance was required immediately. In situations where immediate compliance was not feasible, a compliance schedule was incorporated into the settlement document.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	9a Formal enforcement responses that include required corrective action that will return the facility to compliance in a specified timeframe	100%	N/A	9	9	100%
State response	The Air Program appreciates EPA's acknowledgement of our success under this Element.					
Recommendation						

CAA Element 4 — Enforcement

Finding 4-2	Area for State Improvement												
Summary	Timely action was taken to address HPVs in one of the four files reviewed.												
Explanation	Timely action was taken to address HPVs for one of four cases. This is below the national average of 67.5%. The low percentage may be a combination of data entry delays (see CAA Element 1) and delays encountered while negotiating the cases. MDNR stated that some of the reviewed cases were complex and required additional time to resolve.												
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>10a Timely action taken to address HPVs</td> <td>N/A</td> <td>67.5%</td> <td>1</td> <td>4</td> <td>25%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	10a Timely action taken to address HPVs	N/A	67.5%	1	4	25%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
10a Timely action taken to address HPVs	N/A	67.5%	1	4	25%								
State response	<p>The Air Program appreciates the assistance by Region 7 staff to identify and track HPV enforcement cases. The Air Program is working on a process to ensure timely entry of HPV and other inspection and enforcement data as noted previously. In general, HPV cases are more complex and do require additional time to resolve. The Air Program will communicate the progress towards resolution, including any foreseeable delays to Region 7 staff during monthly coordination calls or as needed. The Air Program will use the monthly call's "HPV Unaddressed/Addressed" list to coordinate the updates and to ensure appropriate follow-up. The Air Program will also discuss additional reporting tools within the Department-wide Assistance Compliance Enforcement (ACE) database.</p>												
Recommendation	<p>Region 7 recommends MDNR continue its efforts to identify and efficiently manage HPV enforcement cases. By December 31, 2014, MDNR should provide EPA with a copy/printout from the tracking system used for HPV enforcement cases. Implementation of a tracking system will allow MDNR to identify areas for improvement in HPV enforcement cases and assist in meeting the HPV policy for timely enforcement. In addition, EPA and MDNR will discuss progress of HPV enforcement cases during monthly enforcement coordination meetings. EPA will consider this recommendation complete once MDNR has demonstrated to EPA that appropriate steps have been taken to address timeliness of HPV enforcement cases.</p>												

CAA Element 4 — Enforcement

Finding 4-3	Area for State Attention					
Summary	An appropriate enforcement response was documented in two of the three files reviewed.					
Explanation	A review of the files found the appropriate enforcement response for HPVs occurred in two of three enforcement cases. Inappropriate enforcement response was documented in one file for issuance of a penalty lower than EPA felt was adequate for the violation.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	10b Appropriate enforcement responses for HPVs	100%	N/A	2	3	66.7%
State response	The Air Program appreciates the information regarding the finding for this Element and will increase our efforts to provide adequate documentation for penalty calculations and negotiations. The Air Program will continue to discuss HPV enforcement during monthly calls with Region 7.					
Recommendation	EPA and MDNR will discuss HPV enforcement cases during monthly enforcement coordination meetings. Region 7 recommends MDNR continue its efforts to improve upon identification and management of HPV enforcement cases.					

CAA Element 5 — Penalties

Finding 5-1	Meets or Exceeds Expectations																	
Summary	Documentation of penalty collection was found in most enforcement files reviewed.																	
Explanation	Documentation of penalty payment was found in 9 of 10 files reviewed. Payment documentation consisted of a copy of the submitted check.																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>12b Penalties collected</td> <td>100%</td> <td></td> <td>9</td> <td>10</td> <td>90%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	12b Penalties collected	100%		9	10	90%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
12b Penalties collected	100%		9	10	90%													
State response	The Air Program appreciates EPA's acknowledgement of our success under this Element.																	
Recommendation																		

CAA Element 5 — Penalties

Finding 5-2	Area for State Improvement						
Summary	MDNR does not have a formal penalty policy and did not adequately document penalty calculations.						
Explanation	<p>MDNR does not have a formal penalty policy for calculating penalties. A Penalty Calculation Worksheet has been developed to provide information on the violations documented and provide reasoning for the penalty. The use of the Worksheet is an improvement in the MDNR process to determine a penalty, but it falls short of the requirements of Metric 11a because it only provides a final penalty amount and does not discuss gravity and economic benefit components of the penalty calculation.</p> <p>A penalty calculation which includes gravity and economic benefit components was found in 1 of 11 files reviewed.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	11a Penalty calculations include gravity and economic benefit		100%	N/A	1	11	9.1%
State response	<p>The Air Program is continuing to modify and improve our penalty calculation form. The form does require the case manager to perform a gravity based assessment based upon the potential for harm and the extent of deviation. These are assessed based upon a major, moderate and minor degree of severity as discussed in our Administrative Penalty Statute (RSMo 643.085) and regulation (10 CSR 10-6.230 "Administrative Penalties"). It is important to note that although the Air Program is currently developing and using a penalty calculation form, an integral part of our process is still reviewing historical enforcement actions (via a database that dates to the late 1990's) to ensure consistent enforcement. The calculation form, in general, lends to a penalty that is consistent to what our enforcement response would have been without it. With regard to an economic benefit calculation, the Air Program is open to including a calculated penalty including economic benefit when we feel that adequate and credible documentation exists to do so. In many instances, it is difficult to calculate economic benefit especially if a facility ultimately was required to attain compliance. The Air Program would appreciate any assistance from Region 7 staff with calculating economic benefit and as we further develop our penalty calculation form.</p>						

Recommendation

This is a longstanding issue that was identified during SRF Rounds 1 and 2. MDNR informed Region 7 that a draft penalty policy has been drafted. Region 7 recommends MDNR continue efforts to finalize a penalty policy which includes gravity and economic benefit components. Until a formal penalty policy is approved and implemented, MDNR should include gravity and economic benefit components in penalty calculations. In addition, MDNR should provide a copy of penalty calculations to EPA for review and comment through June 30, 2015.

CAA Element 5 — Penalties

Finding 5-3	Area for State Improvement												
Summary	MDNR did not adequately document rationale for reducing the initial penalty.												
Explanation	Documentation of the rationale for reducing the original penalty was found in 6 of 11 files reviewed. The reviewers did not identify a common format or media for documenting the penalty reduction rationale. Searching the files the rationale was found primarily in correspondence documents.												
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>12a Documentation on difference between initial and final penalty</td> <td>100%</td> <td>N/A</td> <td>6</td> <td>11</td> <td>54.5%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	12a Documentation on difference between initial and final penalty	100%	N/A	6	11	54.5%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
12a Documentation on difference between initial and final penalty	100%	N/A	6	11	54.5%								
State response	The Air Program agrees with the necessity to appropriately document the rationale behind penalty negotiations. We have initiated these discussions with staff and will begin developing a form as suggested below. The Air Program anticipates development and initiating usage of this type of form in the coming months, but no later than December 2014.												
Recommendation	Region 7 recommends MDNR identify and utilize a consistent format documenting the rationale for penalty reductions. Modification or creation of a case settlement summary form could include a summary of the settlement conditions, as well as the decisions and circumstances leading to a reduction of the initial penalty. By December 31, 2014, MDNR should report to EPA on what improvements have been implemented to ensure that this happens. EPA will review a sampling of settlement documents to determine progress addressing this concern. Review of the settlement documents will occur while EPA staff are present in the MDNR office. The recommended action will be marked complete once EPA is satisfied that state action has resolved this concern.												

STATE REVIEW FRAMEWORK AND INTEGRATED CLEAN WATER ACT PERMIT QUALITY REVIEW

Missouri

Clean Water Act Implementation in Federal Fiscal Year 2013

**U.S. Environmental Protection Agency
Region 7, Kansas City**

**Final Report
January 15, 2015**

Note to Users

This report presents findings and recommendation for the Clean Water Act – National Pollutant Discharge Elimination System (CWA-NPDES). It is structured in four parts, with one overarching Executive Summary followed by individual parts for permitting and enforcement program reviews and an integrated part for findings and recommendations common to permitting and enforcement. The intent of this structure is to allow the user to look exclusively at just Permit Quality Review (PQR) or State Review Framework (SRF) enforcement information individually, or to look at both program parts with an integrated component.

If you are interested in reviewing the CWA PQR information only, see the section titled “CWA-NPDES Permit Quality Review.”

If you are interested in reviewing the SRF information across all programs, look to the section titled “State Review Framework Report.”

The PQR and SRF components of this NPDES program review have been integrated as part of the EPA’s 2009 Clean Water Act Action Plan. The NPDES integrated oversight effort is a way to provide the EPA with a comprehensive understanding of permitting and compliance elements of the NPDES program. Integrated reviews reduce the burden on states by having one joint visit and integrated report. The integrated reviews provide the EPA and the public with a greater understanding of the challenges of a state NPDES program, and it increases transparency through making PQR and SRF results publicly available on the EPA’s website.

Executive Summary

I. Introduction

The National Pollutant Discharge Elimination System (NPDES) Permit Quality Reviews (PQRs) and State Review Framework (SRF) oversight reviews of the Missouri Department of Natural Resources (MDNR) were conducted March 10-13, 2014, by the U.S. Environmental Protection Agency's (the EPA) Region 7 permitting and enforcement staff.

The Clean Water Act (CWA) NPDES program was reviewed under both SRF and PQR. The Clean Air Act (CAA) Stationary Source and Resource Conservation and Recovery Act (RCRA) Subtitle C programs are not included in this report.

SRF findings are based on file metrics derived from file reviews, data metrics, and conversations with program staff. PQR findings are based on reviews of permit applications, permits, fact sheets, along with any correspondence, reports or documents that provide the basis for the development of the permit conditions, and interviews with MDNR staff.

II. Priority Issues to Address

The following are the top-priority issues affecting the state program's performance:

A. CWA-NPDES Integrated SRF-PQR Findings

Following are the most significant issues affecting performance of both the permitting and enforcement programs:

- MDNR must ensure that permits for all cities currently implementing Pretreatment programs contain language that requires implementation in accordance with the requirements of 40 CFR Part 403. Jefferson City, Moberly, Union, Wentzville, St. Peters, Farmington, and Sullivan are missing implementation requirements.
- The CAFO site specific permit is not as stringent as the federal requirements. The permit allows for agricultural stormwater discharges from the production area.

B. Most Significant PQR CWA-NPDES Findings

From the PQR, EPA found the following issues to be most significant:

- MDNR is not sufficiently reviewing Notice of Intents to ensure CAFOs applying for the state no-discharge permit do not discharge to waters of the United States.
- Federal Rules require that permit applications for major POTWs include three priority pollutant scans (40 CFR 122.21(j)(4) and 40 CFR 122.21 appendix J), but MDNR is only requiring one scan from major POTWs.

- The factsheet states that limitations within the permit for the reissuance of permits conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Law and 40 C.F.R. Part 122.44; however, several effluent parameter limitations have changed or been eliminated without an explanation as to how they conform to the backsliding provision.
- MDNR must ensure that permits for POTWs with pretreatment programs include the requirement to reevaluate local limits in a timely manner per 40 CFR 122.44(j)(2)(ii) when the permit has been issued or reissued.

C. Most Significant SRF CWA-NPDES Program Issues¹

- MDNR’s database system MoCWIS is not able to accurately upload data to the EPA ICIS-NPDES database. Environmental compliance data is an important tool for the EPA and the public to add an additional level of environmental compliance tracking.
- MDNR does not consistently issue inspection reports in a timely manner. The state has established protocols which specify the number of days issuing an inspection report. The state does not consistently meet their established timeframes.
- MDNR does not consider the economic benefit a facility may have received when the agency is developing a penalty due to environmental noncompliance. Economic benefit calculations are an important portion of the penalty evaluation as a facility can receive significant cost savings if the facility ignored environmental regulations.

¹ the EPA’s “National Strategy for Improving Oversight of State Enforcement Performance” identifies the following as significant recurrent issues: “Widespread and persistent data inaccuracy and incompleteness, which make it hard to identify when serious problems exist or to track state actions; routine failure of states to identify and report significant noncompliance; routine failure of states to take timely or appropriate enforcement actions to return violating facilities to compliance, potentially allowing pollution to continue unabated; failure of states to take appropriate penalty actions, which results in ineffective deterrence for noncompliance and an unlevel playing field for companies that do comply; use of enforcement orders to circumvent standards or to extend permits without appropriate notice and comment; and failure to inspect and enforce in some regulated sectors.”

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CWA-NPDES Integrated SRF and PQR Review

I. Introduction

The EPA reviews regional and state Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permitting and enforcement programs every five years. During these reviews, the EPA staff review NPDES program implementation and enforcement. A component of each review is the Permit Quality Review (PQR), which assesses whether a state adequately implements the requirements of the NPDES program as reflected in the permit and other supporting documents (e.g., fact sheet, calculations). A second component of these reviews is the State Review Framework (SRF), which evaluates state enforcement programs.

Through these reviews, the EPA promotes national consistency, identifies successes in the base NPDES program, and identifies opportunities for improvement in the development and implementation of NPDES permits and enforcement. The findings of these reviews may be used by the EPA headquarters to identify areas for training or guidance, and by the EPA region to help identify and assist states in determining action items to improve their NPDES permitting and/or enforcement programs.

The EPA conducted an integrated oversight review of the Missouri NPDES permitting and enforcement and compliance program by combining a PQR and a SRF review on March 11-13, 2014. The PQR is designed to assess how well the State implements the requirements of the NPDES program as reflected in NPDES permits and other supporting documents. The PQR reviewed the administrative record for selected NPDES permits (core permits) using a standardized checklist. Additionally, the PQR looked at four National Topics (areas of national importance), and Regional Topics (area of Regional importance) listed below:

National Topic Areas

- nutrients,
- pesticides,
- pretreatment, and
- stormwater

Regional Topic Area

- 316 (a) Thermal Discharge,
- 316 (b) Cooling Intake Structures,
- WET,
- Sludge, and
- CAFOs

The SRF review is designed to ensure a minimum baseline of consistent performance across states, and that the EPA conducts oversight of state enforcement and compliance programs in a nationally consistent and efficient manner. The SRF review looked at program elements covering:

- data (completeness, timeliness, and quality),
- inspections (coverage and quality),
- identification of violations,
- enforcement actions (appropriateness and timeliness), and
- penalties (calculation, assessment, and collection)

These reviews examined data and files generated and kept by the Missouri Department of Natural Resources.

The reviews were conducted in three phases: analyzing information from the national data systems, reviewing a set of state files and permits, and the development of findings and recommendations. Consultation was built into the process to ensure the EPA and the state understand the causes of issues, and to seek agreement on identifying the actions needed to address issues. As part of the reviews conducted in 2014 in Missouri, Region 7 reviewed the State's program authorization documents and the State's Memorandum of Agreement (MOA) using the final approved Guidance for NPDES MOAs between States and the EPA. The EPA is currently working with the state on developing an updated MOA.

The integrated review examined data and files generated and kept by the Missouri Department of Natural Resources. This section focuses only on the integrated PQR and CWA SRF NPDES program findings.

The report is designed to capture the information and agreements developed during the review process in order to facilitate program improvements. The report is designed to provide factual information. The EPA also uses the information from the integrated reviews to draw a "national picture" of the NPDES program, to develop comparable state performance dashboards, and to identify any issues that require a national response.

II. Coordination Between Permitting and Enforcement

The state of Missouri became fully authorized to perform CWA NPDES functions on December 12, 1985. The Missouri Clean Water Law grants authority to the MDNR to implement the state's CWA/NPDES permitting, compliance, and enforcement programs. The Division of Environmental Quality within the MDNR central office in Jefferson City houses the Water Protection Program, which has a branch responsible for all permitting and formal enforcement functions. Permitting and enforcement decisions of elevated importance in MDNR must be approved by the state's Clean Water Commission, which is a seven-member citizen's board appointed by the governor and confirmed by the Senate.

The MDNR's regional offices, run by the Division of Field Services, conduct compliance inspections and work with entities to resolve violations voluntarily. Incidents of noncompliance that cannot be resolved through voluntary or informal enforcement measures are referred to the Water Protection Program for formal enforcement. The state Attorney General elects to take

enforcement cases that MDNR is unable to resolve administratively. More information on MDNR's enforcement escalation policy can be found in Appendix B.

III. Integrated Review Background

The EPA Region 7 permitting and enforcement staff conducted an integrated review during March 2014. The review consisted of a review of permit, compliance, and enforcement files for facilities selected by the EPA that MDNR provided electronically. These file reviews took place in the EPA office in early March 2014 and in MDNR's central office during the week of March 11-13, 2014, at which time the EPA staff also conversed with state staff on the implementation of their program. To facilitate an integrated review, the EPA staff from the two programs worked adjacent to one another during the review week, compared notes prior to the exit briefing at the end of the review week, and collaborated to develop common findings prior to finishing the draft report.

The CWA SRF reviewed 67 enforcement files. To facilitate the coordination of the PQR and SRF reviews, and to encourage dialogue between the permitting and enforcement components of the NPDES Program, several common files were selected for both the PQR and SRF reviews. The common files/permits reviewed were:

- MO-0039659 Eureka WWTF
- MO-0134147 JCSD, Mirasol WWTF
- MO-0023663 Drexel South WWTF
- MO-0088072 BRANDCO Investments
- MO-0119962 Sharpe Holdings
- MO-GS1 State No-Discharge Concentrated Animal Feeding Operation
- MO-RA Construction or land disturbance
- MO-R04 Small Municipal Separate Storm Sewer Systems

Aside from the oversight provided in this integrated review, the EPA Region 7 permitting and enforcement staff work together closely on an as-needed basis to review draft general permits from the state as well as other permits for which the Region has noted past concerns with compliance at the facility. In addition, permitting staff routinely review major and minor permits as they are placed on public notice. The location of Region 7's permits branch and water enforcement branch in the same division lends to efficient coordination over such matters.

For detailed information on the background of Missouri's permitting program, see the State Permitting Program Overview in the PQR part of this report. For detailed information on the background of Missouri's compliance and enforcement program, see Appendix B.

IV. How Report Findings Are Made

The findings in this report were made by the EPA Region 7's permitting and enforcement staff after analyzing data in the national data systems and reviewing facility files at the state.

Permitting and enforcement staff consulted with state staff and each other before determining findings. Findings cover both positive and negative aspects of the state's performance. Where the state program was doing particularly well or was meeting all of its requirements, the EPA identified these areas in the sections below. Where the EPA found the state had opportunities to improve both permitting and enforcement, the EPA suggested an appropriate course of action.

V. Common Findings

This section describes findings, recommendations, and follow-up activities identified as common issues for CWA enforcement and permitting. These issues also appear in the PQR and/or SRF parts of the report, as noted for each item, unless the item does not fit within any PQR areas of consideration or SRF metrics (e.g. permit enforceability findings and a Pretreatment finding, as noted).

Pretreatment:

Finding: MDNR must ensure that permits for all cities currently implementing Pretreatment programs contain language that requires implementation in accordance with the requirements of 40 CFR Part 403. Jefferson City, Moberly, Union, Wentzville, St. Peters, Farmington, and Sullivan are missing implementation requirements.

Finding: MDNR must ensure that permits for POTWs with pretreatment programs include the requirement to reevaluate local limits in a timely manner per 40 CFR 122.44(j)(2)(ii).

Concentrated Animal Feeding Operations:

Finding: The MDNR definition of process wastewater must be as stringent as the federal regulation at 40 CFR 122.23(b)(7). The definition must include water directly and indirectly used in the operation of a CAFO.

Finding: All uncontaminated stormwater originating outside of the production area footprint should be diverted to prevent contact with manure, litter, or process wastewater as specified in CFR 40 §122.42 (e)(iii). Any process wastewater/stormwater that comes in contact with these materials as specified in 40 CFR 122.23(b)(7) must be collected and disposed of in a manner that is consistent with the CWA. Authorization of discharges of process wastewater must be pursuant to a NPDES permit and consistent with the Effluent Limitation Guidelines.

Finding: MDNR is not sufficiently reviewing NOIs to ensure CAFOs applying for the state no-discharge permit do not discharge to waters of the United States.

Finding: The Wet Weather Management guide (PUB2422) contains practices that minimize discharges from land application areas during wet weather events. Implementation of the Wet Weather Management guide at CAFOs without an NPDES will not negate CWA liability. The references to PUB2422 should either be removed from the state permit or the guide should be revised based on the no-discharge requirement.

Inspections at CAFOs operating without an NPDES permit need to effectively evaluate and clearly document whether the facility discharges and is subject to NPDES permitting requirements.

I. PQR BACKGROUND

National Pollutant Discharge Elimination System (NPDES) Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations. Through this review mechanism, the EPA promotes national consistency, and identifies successes in implementation of the NPDES program and identifies opportunities for improvement in the development of NPDES permits.

The EPA's on-site PQR review team, Sunny Wellesley, Donna Porter, Mark Matthews, and John Dunn, conducted the on-site review portion of the MDNR NPDES permitting program in Jefferson City, MO from March 10 to March 13, 2014. Kimberly Hill conducted portions of the review from Region 7's office in Lenexa, Kansas.

The MDNR's PQR consisted of two components: permit reviews and special focus area reviews. The permit reviews focused on core permit quality and included a review of the permit application, permit, fact sheet, and any correspondence, reports or documents that provided the basis for the development of the permit conditions.

The core permit review involved the evaluation of selected permits and supporting materials using basic NPDES program criteria. Reviewers completed the core review by examining selected permits and supporting documentation, assessing these materials using standard PQR tools, and talking with permit writers regarding the permit development process. The core review focused on the Central Tenets of the NPDES Permitting Program² to evaluate the MDNR's NPDES program. In addition, discussions between the EPA and state staff addressed a range of topics including program status, the permitting process, responsibilities, organization, and staffing. Core topic area permit reviews are conducted to evaluate similar issues or types of permits in all states. The national topics reviewed in the Missouri NPDES program were: nutrients, pesticide general permit, pretreatment, and stormwater.

Regional topic area reviews target regionally-specific permit types or particular aspects of permits. The regional topic areas selected by the EPA Region 7 included: 316 (a) Heat discharge, 316 (b) Intake Structure, Sludge Program, Whole Effluent Toxicity (WET), and CAFOs. These reviews provide important information to Missouri, the EPA Region 7, the EPA HQ and the public on specific program areas.

II. STATE PROGRAM BACKGROUND

A. Program Structure

The State of Missouri has been authorized by the EPA to administer a program equivalent to the federal NPDES program. Missouri has termed their permits as State Operating Permits; the operating permits are issued through the Clean Water Commission and are considered as effective as federal permits under the NPDES program. The EPA oversees the state permitting program and provides the national framework for the NPDES Program, including requirements

² <http://www.the EPA.gov/npdes/pubs/tenets.pdf>

for state programs. This program authorization involves permitting, inspection and enforcement activities, requiring varying interactions between MDNR and their regulated community.

The Missouri Clean Water Commission consists of seven members who are appointed by the governor. Each commission member represents the general interest of the public and has an interest in and knowledge of conservation and the effects and control of water pollutants. The duties of the commission are to issue permits for the construction and operation of wastewater treatment facilities or other point sources, monitor waters of the state and plan to protect and improve them; inspect and monitor water contaminant sources; investigate complaints from the public; adopt regulations; enforce the Clean Water Law and State regulations; and administer grants to municipalities and political subdivisions for construction of wastewater treatment facilities.

MDNR’s responsibilities also include water quality monitoring and analysis, technical assistance and education. MDNR also provides financial assistance for construction of wastewater infrastructure projects at publicly-owned treatment works. The program has helped communities keep up with infrastructure needs and comply with CWA requirements.

MDNR operates a Central Office located at Lewis and Clark State Building, 1101 Riverside Dr., Jefferson City, MO and five Regional field offices with satellite offices within each office. The Regional offices are located in Springfield, with satellite offices at Lake of the Ozarks and Newton County; Macon with a satellite office at Kirksville; Popular Bluff, with satellite offices at Cape Girardeau County, Howell County, Madison County, and Rolla Satellite; Kansas City, with satellite offices at Northwest Missouri and Truman Lake; St. Louis, with satellite offices at Franklin County, Jefferson County, and Lincoln County. MDNR’s Regional Offices conduct field inspections, complaint investigation, and provide technical assistance on environmental issues and emergencies.

MDNR’s WPP also conducts water quality monitoring in an effort to track pollution trends and to educate their citizens on natural resources. Monitoring allows the department to customize permit limitations based on the unique conditions of the waterbody. Monitoring also provides the evidence of water quality improvement. Impairments of waterbodies comes from many sources, addressing them and documenting the restoration of waters to meet water quality standards is a major goal for the program.

At the time of the review, the MDNRs NPDES program has nineteen permit writers. The program is split into several sections.

Permits Section Chief – Chris Wieberg		
Industrial Unit Chief (includes CAFO)- Amanda Sappington	Stormwater Unit Chief- Carrie Schulte	Domestic Unit Chief- Curt Gateley
Tony Dohmen	Joshua Ernst	Cameron Eisterhold
Logon Cole	Stacia Bax	Charles Harwood

Thabit Hamoud	Ruth Wallace	Johnny O'Dell
Greg Caldwell	Chris Miller	Lacey Hirschvogel
Vacant		Emily Twining-Gerdes Andrew Combs
		Angela Falls
		Brant Farris

The WPP also has three water quality modelers, four Total Maximum Daily Load (TMDL) staff members, an engineering section, a financial assistance center, and an antidegradation unit. Each of these groups are not permit writers but they assist permit writers by providing them vital information necessary to write a complete and effective permit.

The EPA and MDNR are in the process of revising the existing Memorandum of Agreement (MOA) between the EPA and state governing the NPDES permit and enforcement programs as part of the Agency's activities under the October 15, 2009, Clean Water Act Action Plan (CWA Action Plan), and the Interim Guidance to Strengthen Performance in the NPDES Program (June 22, 2010). EPA Region 7 revised the existing MOA and submitted to MDNR for review. At the time of the on-site review, there have been on-going discussions regarding the revision of the MOA.

B. Universe and Permit Issuance

As seen in the tables below (counts are current as of March 2014) MDNRs permitting universe is comprised of 3,013 site specific Missouri State Operating permits and 3,578 facilities covered by a set of general permits.

Table 1

Publicly Owned Treatment Works (POTWs)	Permits
Majors (greater than 1 million gallons per day)	122
Non majors (less than 1 million gallons per day)	781
Combined sewer overflows	5

Table 2

Non municipal	Permits
Majors	49
Major industrial stormwater	4
Non major	2,038
CAFO (concentrated animal feeding operations)	21

Table 3

Stormwater	Permits
Municipal	3
Industrial	198
Construction	2916
Non stormwater general permit	534
CAFO general permit	505

Table 4

General permit categories (MO-R and MO-G)
Small Municipal Separate Storm Sewer Systems
Oil/Water Separators
Agrichemical Facilities - SIC 5191
Swimming Pools Discharges
Fab. Metal, Light Industrial
Small Domestic Discharges $\leq 50,000$ gpd
Lumber and Wood Primary
Solid Waste Transfer
Clay Pits
Wood Treaters
Chemical Mfg.
Hydro Testing Non-Petroleum Related Pipelines and Storage Tanks
Sand and Gravel Washing
Heat Pumps
Fuel Spill Cleanup
Plastics and Rubber Mfg.
Abandoned Mine Land Reclamation
Land App of Food Processing WW
Limestone Quarries
Pesticide Applications
Construction or Land Disturbance
Land App of Domestic Wastewater
Land Disturbance by City or County
Petroleum Storage <250,000 gallons
Hydrostatic Testing Petroleum Related Oil & Gas Pipelines and Storage Tanks
Land App Dom WW Biosolids ≤ 2000
Motor Freight Transportation
Airports
Feedstock Compost Sites
Yard Waste Compost Sites
Agricultural, Wood, and Food Product Compost
State No-Discharge CAFO
CAFO: Concentrated Animal Feeding Operation

Dredging Lakes/River Harbors
Dredging on the Missouri and Mississippi Rivers
Textile and Apparel/Printing and Publ.
Zeolite Softeners
Biodiesel Manufacturing
Car Wash
Lumber and Wood (Secondary)
WTP Settling Basins (MO & MISS)
Motor Vehicle Salvage
Fish Farms/Hatcheries

MDNR has a backlog of 196 (6.5 % of universe) individual permits. The backlogged permits are comprised of 18 major and 178 minor permits. Complex issues such as 316 (a) and (b), TMDLs with nutrient wasteload allocations, and water treatment plants discharging to the Missouri and Mississippi River are just some of the reasons for permitting backlog.

When MDNR receives a permit application, it is first logged in with date received into the Missouri Clean Water Information System database (MoCWIS). MoCWIS is MDNR's in-house data management system. It is used to track applications, permits, discharge monitoring reports, compliance monitoring and enforcement activities. The database is a web enabled user interface system and submits permit and DMR information to ICIS weekly. If an application is received with a fee, the check number, amount and date is written on the application and recorded into MDNR's accounting system known as SAM II. Next the application will be reviewed for completeness, that all required and necessary information has been included, along with fees (if necessary). MDNR has developed a completeness checklist for their permit writers to use to help them identify if the application package is incomplete. Depending upon the issue, a permit writer may determine that the application is incomplete and return it to the applicant with a letter explaining the deficiency.

An operating permit includes several parts: 1) Cover page, 2) Certificate Page, 3) Effluent Limitations, 4) Monitoring and Reporting Requirements, 5) Special Conditions, 6) Standard Conditions, and 7) Fact Sheet or Statement of Basis. In addition, a water quality review sheet and/or antidegradation review may also be attached to the permit if one was needed. All developmental documents produced during the permit application review period are also considered as an integral part of a permit and will be made part of the facility record. The purpose of a permit is to document the requirements and to establish standards for a facility that discharges or otherwise disposes (e.g. irrigates) wastewater. Once a permit has been issued, it is enforceable by MDNR, the EPA and by private citizens.

The permit writer will prepare a draft permit for public notice. Public notice of a permit notifies interested parties that a draft permit is pending and then allows at least 30 days for public comment. Notification of the public notice is sent to the applicant, post office, downstream landowner, and also placed on MDNR's website. If a permit has a high degree of interest, a public hearing can be held and a notification for the hearing would be announced 30 days prior to the event. In the case of an applicant request for a permit modification or a termination request is denied public notice is not required, rather, the applicant would be notified of the denial in writing. All relevant comments received in response to the public notice shall be given

consideration before making final permitting decisions. A written response will be made to significant comments on the draft permit raised during the public notice comment period.

Permit issuance occurs as soon as possible after the end of the public comment period and after all appropriate comments have been incorporated into the permit. Permitting staff strive to issue site-specific operating permits within 180 days and general permits within 60 days of the receipt of the permit application. An applicant may appeal any condition in the permit within 30 days of notification of issuance. Appeals are filed with and heard by the Administrative Hearing Commission. The appeal may be made by the applicant, permittee, or any other person with an interest that is or may be adversely affected.

C. State-Specific Challenges

MDNR has gone through many structural changes. Management personnel have changed positions and many of the permit writers have less than one year of experience. In addition to the restructuring and personnel changes, MDNR has been making several changes to permitting procedures in an effort to streamline their processes.

Several House Bills (HB) that have passed have proven to be challenging. These HBs have required MDNR to undergo many new procedures. Listed below are a few of the HBs:

HB 89 stated the following requirements for MDNR:

Affordability Determinations

The act requires the Department of Natural Resources to study and make a determination regarding the affordability to communities and their residents of permit requirements and other department decisions related to combined or separate sanitary sewer systems or publicly-owned treatment works or that no finding is required because the permit contains no new conditions or requirements that convey a new cost to the facility. The affordability determination must be made prior to issuing a permit or rendering a decision or else the permit or decision is void and unenforceable.

The act lists criteria the department must use in developing its procedures for determining affordability. The criteria include: a community's financial resources; affordability of pollution control options; an evaluation of the overall costs and environmental benefits of the control technologies; ways to reduce economic impacts on distressed populations in the community; an assessment of other community investments relating to environmental improvements; an assessment of factors in certain federal guidance; and other relevant local community economic conditions. Affordability determinations must be made in the context of all relevant factors and indicators, and should not be based on the achievement of one single economic or social factor or measure.

Clean Water Permit Fees

Under current law, the authority expired on December 31, 2010 for the Clean Water Commission to charge fees for construction permits, operating permits, and operator's certifications related to water pollution control. This act extended the expiration date to September 1, 2013.

The act required the Department of Natural Resources to study the fees and present a plan for the fees to the General Assembly by December 31, 2012. The department was required to conduct stakeholder meetings and provide a plan that included timelines for permit issuance, ways to expedite permits, and recommendations for improved services. MDNR followed through by creating a Clean Water Fee Stakeholder group. The Stakeholder group worked together and finalized the required study to the General Assembly by the given deadline.

HB 1074 stated the following requirements for MDNR:

This bill prohibits the Missouri Clean Water Commission from modifying any permit by increasing or decreasing the volume of any water contaminants or pollutants authorized by the permit to be discharged from any point source or changing any existing limits within the 12 months immediately before any new construction or operating permit is issued until an independent and unique study commissioned by the state verifies the environmental and economic need for the increase or decrease for each stream segment affected. This amendment has been adopted and currently has a proposed effective date of August 8, 2014.

HB 2256 stated the following requirements for MDNR:

No department or agency of this state shall be required to enforce any regulation promulgated by any federal agency. No department or agency of this state shall enforce any regulation promulgated by any federal agency within the borders of this state unless the enforcement of such regulation is approved by the general assembly.

MDNR has increased the number of stakeholder groups/meetings. This action has provided more opportunity for the citizens to become involved with MDNR. While these stakeholder meetings are necessary for MDNR, they are very time consuming and have affected staff by increasing their workload. Another issue has been the process of obtaining stakeholder consensus. At times stakeholders have not been able to reach an agreement, and this can result in delaying MDNR from moving forward on several action items.

D. Current State Initiatives

Previously, MDNR conducted their permitting activities in combination with the Regional Offices and their Central Office. The Regional Offices were charged with writing general permits and site specific permits that had a design flow of less than one million gallons per day. The Central Office wrote all other permits with a design flow of greater than one million gallons per day. However, during this time period MDNR realized that there were inconsistencies in permits among the Regional Offices. MDNR, striving for consistency, began to centralize permitting activities in 2012. Centralization has helped MDNR's permit issuance processes and

consistency in permits, since drafting and issuing of permits is under one process and review unit.

The Regional Offices, however, are still responsible for many of the permitting activities. Staff provides assistance for applicants applying for an electronic land disturbance permit, provide information to the Central Office permit writers as requested, review general permit applications and then finalize the permitting action depending upon the application type by terminating, transferring, modifying, or issuing. Regional staff also review No-Exposure Certification requests and provide notification of exclusion from permitting with associated no-exposure number or require an application for a permit based upon the information obtained during a site visit.

Another useful tool MDNR has developed to help with consistency is the Water Pollution Control Permits Manual. The permits manual is continuously updated to incorporate new information and process changes. The Permits Manual is a guidance document for the permitting staff to help them find basic information and to find other relevant resources. It is intended to help MDNR staff involved in water pollution control permitting follow the same basic processes and guidelines when drafting permits. This manual is available on MDNR's website so that all interested parties would be able to understand MDNR's permitting process.

In conjunction with centralization, MDNR moved toward a Watershed based management system. This system was a phased approach that included: partnership building, assessing and documenting concerns, setting watershed goals, identifying solutions, and developing an implementation plan for completing activities. Watershed based management provided the basis for coordinating water activities over a five year time frame. Its goals are to coordinate an approach to evaluate each watershed at a defined scale and set up a statewide schedule to rotate watersheds and NPDES permits on a five year phased approach. This process created permit synchronization, in which all permits within a watershed would be moved through the Watershed based management cycle together and would expire in the same fiscal year. With this approach, some permits will be issued for less than the full five years in order to achieve synchronization.

MDNR has developed a web-enabled electronic system for wastewater facilities to streamline the management of discharge monitoring reports (DMRs), otherwise called eDMRs. The eDMR system provides wastewater treatment facilities with an alternative way to submit DMR data and allows the department to electronically validate the data, acknowledge receipt, and upload data to Missouri's Clean Water Information System (MoCWIS) database. Creation of this system has saved facilities money by decreasing compliance costs, reduced resources spent on paper DMRs, and improved the accuracy of compliance data.

ePermitting is another new program that has been implemented. ePermitting is an on-line system for which the applicant is able to obtain a general land disturbance permit on the same day. Whereas prior to ePermitting, a land disturbance permit involved a paper application, several permit's staff and took several days to issue the permit. This new system has greatly reduced the manpower spent since general land disturbance permits make up approximately 44% of all clean water permits.

MDNR has also increased their involvement with stakeholders on a variety of clean water topics. These stakeholders are members of the public and any other interested parties wanting/willing to participate in discussions to come up with goals and solutions for any given topic. WPP hosts a series of formal meetings that include open discussions between the stakeholders and WPP staff. These meetings are streamed live over the Internet and open to the public to attend. In addition to these major formal meetings, WPP holds several smaller, ad hoc groups to discuss sector-specific interests in which stakeholders help to provide a variety of suggestions. Stakeholder input has created collaboration and understanding, not only between them and MDNR but also between the stakeholder members. MDNR does well to update their web page for these meetings. They post agendas, presentations, and handouts from the stakeholder meetings. Listed below are the different meeting types:

- [303\(d\) Public Hearing](#)
- [Clean Water Commission](#)
- [Clean Water Fee Stakeholders](#)
- [Nutrient Reduction Strategy](#)
- [On-Site Wastewater Stakeholders](#)
- [Water Classification Workgroup](#)
- [Water Permit Fee Stakeholders](#)
- [Water Protection Forum](#)

Additional initiatives that MDNR has made include: 1) revisions related to short-term E. coli limits and E. coli monitoring frequency; 2) revision of the bypass language to match the federal definition; 3) specifying that operating permits may include schedules of compliance in accordance with federal regulations; 4) language that details the different authorities for placing limits in permits; 5) language that clarifies the reasons for including whole effluent toxicity testing requirements and nitrate limits in certain permits; 6) a requirement for quarterly effluent monitoring for nutrients at large wastewater treatment plants; and 7) language that would allow for reduced effluent monitoring frequencies at facilities that routinely meet limits and do not have high variability.

III. CORE REVIEW FINDINGS

A. Basic Facility Information and Permit Application

1. Facility Information

Basic facility information is necessary to properly establish permit conditions. For example, information regarding facility type, location, processes and other factors is required by NPDES permit application regulations (40 CFR 122.21). This information is essential for developing technically sound, complete, clear and enforceable permits. Similarly, 40 CFR 124.8(b)(1) specifies that fact sheets must include a description of the type of facility or activity subject to a draft permit.

2. Permit Application Requirements

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking NPDES permits. Although federal forms are available, authorized states are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assesses whether appropriate, complete, and timely

application information was received by the state and used in permit development. MDNR uses its own application forms, but they are based on the EPA's forms. However for No exposure certifications MDNR utilizes the EPA's form.

Once an application is received by MDNR, it is checked to see if a permit fee is required. If all fees are up to date, the application is forwarded to the operating permits section where it is assigned a folder tracking number and then forwarded to the appropriate unit chief. The unit chief assigns the application to a permit writer for review. The application is then reviewed for completeness and a letter or email is drafted to the permittee notifying them that the permit has been assigned and indicating any incomplete information that is required for further processing.

MDNR also sends out renewal reminder letters about 7-8 months prior to expiration for site specific permits and 60 days prior to the expiration of general permits.

The applications reviewed during this PQR provided the required basic facility information; however Federal Rules require that permit applications for major POTWs include three priority pollutant scans (40 CFR 122.21(j)(4) and 40 CFR 122.21 appendix J). MDNR is only requiring one scan from major POTWs.

B. Technology-based Effluent Limitations

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, fact sheets and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether technology based effluent limitations (TBELs) were the appropriate level of control for the permitted facilities.

MDNR utilizes the EPA's established daily and monthly limits for certain industries based on the production of the facility, or, more commonly, a simple concentration based limit. Both daily and monthly limits must be included in the permit. MDNR recommends that their permittees target the design of its treatment system to meet the long-term average monthly rather than the daily limits, since the daily limit is intended to account for variation in effluent concentration above the monthly limit. TBELs are found in MDNR's regulations at 10 CSR 20-7.015 which contains technology based limits for BOD, TSS and pH for domestic waste discharges.

1. TBELs for POTWs

POTWs must meet secondary or equivalent to secondary standards (including limits for BOD, TSS, pH, and percent pollutant removal), and must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133. POTWs are routinely reviewed as they are put on public notice. These reviews indicate that Missouri is appropriately establishing technology-based permit limits for POTWs: all permits reviewed contained all parameters required by 40 CFR Part 133, based on the secondary treatment process, and limits were set using correct units of measure.

2. TBELs for Non-POTW Dischargers

Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. Where federal effluent limitations guidelines

(ELGs) have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case basis using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d).

Region 7 routinely reviews industrial permits. In the Permit Rationales permit writers identify applicable ELGs and document the calculation of permit limits. Missouri utilizes 10 CSR 20-7.015 with the development of TBELs. The state rule essentially mirrors federal requirements for TBELs. MDNR establishes what the pollutant of concern would be in regard to the discharge. Permits reviewed, such as BASF permit, show that state permit writers work to assess the proper SIC codes and applicable effluent guidelines. Fact sheets then show how the guidelines are applied to calculate TBELs. Where there is no effluent guideline, permit writers follow 40 CFR 125.3(d) which tells the permit writer to apply the six factors associated with setting BPJ-based TBELs.

C. Water Quality-Based Effluent Limitations

The NPDES regulations at 40 CFR 122.44(d) require permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve state water quality standards, including narrative criteria for water quality. To establish such “water quality-based effluent limits” (WQBELs), the permitting authority must evaluate the proposed discharge and determine whether technology-based requirements are sufficiently stringent, and whether any pollutants or pollutant parameters could cause or contribute to an excursion above any applicable water quality standard.

The PQR for MDNR assessed the processes employed by permit writers and water quality modelers to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, and other documents in the administrative record to evaluate how permit writers and water quality modelers:

- determined the appropriate water quality standards applicable to receiving waters;
- evaluated and characterized the effluent and receiving water including identifying pollutants of concern;
- determined critical conditions;
- incorporated information on ambient pollutant concentrations;
- assessed any dilution considerations;
- determined whether limits were necessary for pollutants of concern and, where necessary;
- calculated such limits or other permit conditions.

For impaired waters, the PQR also assessed whether and how permit writers consulted and developed limits consistent with the assumptions of applicable the EPA-approved total maximum daily loads (TMDLs).

MDNR calculates water quality-based effluent limitations using the procedures found in the Technical Support Document for Water Quality-Based Toxics Control (TSD) [EPA/505/2-90-00]. If the water body has designated uses to protect human health such as drinking

water supply (DWS), human health fish consumption, groundwater protection, or irrigation, and in comparison to the aquatic life criteria for that pollutant of concern, the most stringent criteria is the human health criteria; water quality-based effluent limit must be based upon the more stringent criteria.

To establish reasonable potential to exceed applicable water quality criteria, MDNR uses the following procedures for a pollutant of concern.

- 1) Discharge Monitoring Report (DMR) data for the pollutants of concern must be obtained in electronic format from DMRs reported by the permittee. Typically, five years of data is used, if available.
- 2) Review current permit for revisions during the course of the permit cycle.
- 3) Check data for representativeness and outliers.
- 4) Check the method detect limit or minimum level for parameter at: <http://www.nemi.gov/>.
- 5) Assign approach for non-detection or values at the minimum level.
 - a. Hardness data is a consideration for hardness-dependent metals and should be the lower 25 percentile [10 CSR 20-7.031(1)(Y)].
- 6) Once outliers are determined, DMR data should be copied to a new or existing Microsoft Excel spreadsheet and the following calculations performed on the data:
 - a. Number of samples in the data set – Count;
 - b. Maximum data point – Max;
 - c. Minimum data point – Min;
 - d. Mean data point – Average;
 - e. Standard Deviation of the data set – StDev;
 - f. Coefficient of variation (CV) – Stdev/Mean.
- 7) Characterize the highest measured effluent concentration based on the 99th percentile confidence level. The value of $_{-n}$ is the percentile represented by the highest concentration in the dataset that has ‘n’ number of samples.
- 8) Determine the relationship between the percentile represented by the highest concentration in the dataset and the 99th percentile upper bound of the lognormal effluent distribution (C_{99}/C_{-n}). Where CV is the coefficient of variation determined from the data set and ‘z’ is the normal distribution value for the $_{-n}$ percentile (Note: If $n < 10$, the coefficient of variation (CV) is estimated to equal 0.6, TSD on Page 50, Box 3-2): Note: $Z_{99} = 2.326$
- 9) Calculate the z-score, which is the distance from the sample mean to the population mean in units of the standard error or use the table at: http://en.wikipedia.org/wiki/Standard_normal_table
- 10) To obtain a maximum effluent concentration based on the distribution and variability of effluent data, the relationship determined in Step 8 is multiplied by the maximum value determined in Step 6.
- 11) The maximum effluent concentration and appropriate available dilution are used to project a maximum receiving water concentration (RWC) using the mass balance approach.
- 12) Compare the projected maximum RWC with applicable criteria (acute (CMC), chronic (CCC), or reference ambient concentration (RAC)). RAC is the concentration of a chemical in water that will not cause adverse impacts to human health. If the maximum RWC is greater than the applicable ambient criterion, there is reasonable potential to

cause an exceedance of the criterion (More recent permits have a minimally-degrading effluent limit (MDEL) that maintains the assimilative capacity less than 10% for Tier 2 pollutants. For these POCs, the RWC is compared to the maximum daily limit for that POC's MDEL).

- 13) The results of the comparison between RWC and applicable criteria will require the reviewer to decide between removal or application of a limit, reduction to monitoring only, or depending on the results of the last RPA, discontinuing monitoring only.

It is noted that some of the permit application data provided was not being applied when calculating Reasonable Potential as was found in the review of the Carthage and Platte City permits.

The EPA on September 18, 2013, commented on MDNR's June 17, 2013, proposed revisions to their effluent regulations (10 CSR 20-7.015) and water quality standards (10 CSR 20-7.031). The EPA supported many of the revisions; however, recommended some modified provisions in order to clarify MDNR's intentions.

D. Monitoring and Reporting

NPDES regulations at 40 CFR 122.41(j) require permittees to periodically evaluate compliance with the effluent limitations established in their permits and provide the results to the permitting authority. Monitoring and reporting conditions require the permittee to conduct routine or episodic self-monitoring of permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual monitoring for all limited parameters sufficient to assure compliance with permit limitations, including specific requirements for the types of information to be provided and the methods for the collection and analysis of such samples. In addition, 40 CFR 122.48 requires that permits specify the type, intervals, and frequency of monitoring sufficient to yield data which are representative of the monitored activity. The regulations at 40 CFR 122.44(i) also require reporting of monitoring results with a frequency dependent on the nature and effect of the discharge. All of the permits reviewed included a description and appropriate level of monitoring.

According to MDNR, for pollutants with an effluent limitation they gather sufficient data to establish a record of performance for the facility to ensure that they are in compliance. For pollutants without effluent limits the goal is collecting enough data to determine reasonable potential. In both of these cases, the minimum monitoring frequency is quarterly. Monitoring for pollutants without effluent limits is most often required when the permit writer has reason to believe the pollutant may exist in the effluent, but does not have enough information to determine if reasonable potential exists. Monitoring is also required in situations where no reasonable potential exists, but the pollutant still exists in the waste stream and MDNR seeks to verify the continued efficacy of pollution controls (normally for those with pretreatment programs, and for ammonia treatment at the WWTF).

The frequency of monitoring will depend on the design flow of the facility. Guidelines for monitoring frequency for processed wastewater outfalls are as follows:

Design Flow	Frequency
Less than 25,000 gallons/day	Once/year
25,000-1,000,000 gallons/day	Once/year for each 50,000 gal/day or fraction thereof
Greater than 1,000,000 gallons/day (1 mgd)	A minimum of 20 samples/year unless applicant can show that wastewater has a consistent quality.

MDNR has set the sampling frequency to be spread out evenly throughout the discharge year. This means that a point source with continuous discharge will take samples on a regular schedule, and point sources with seasonal discharge will sample during their operating seasons. The monitoring frequency and sample types stated above are minimum requirements. The permit writer establishes monitoring frequencies and sampling types to fulfill the site specific informational needs.

Discharges from stormwater outfalls are often unknown. And so it depends on the amount and timing of precipitation, the size of the drainage area above the outfall, topography, vegetative cover, and amount of impervious surface within the drainage area. For major facilities (e.g. those with design capacities of more than 1million gallons per day of processed wastewater) and for construction sites, a sample for each precipitation event that produces runoff may be required. For smaller facilities, samples taken once a month or once a quarter may be sufficient.

The frequency of In-Stream monitoring depends on the size of the facility. The size of the receiving stream is also taken into account. As a guideline, MDNR sets the following in-stream monitoring frequencies based on facility size and receiving stream characteristics. However, there are times when it is not possible to establish an upstream monitoring point for facilities that are located in headwater areas of streams where there may be no flow.

MDNR has several types of reporting and record keeping requirements for permits including the documentation of:

- 1) the characteristics of discharges;
- 2) facility operations and management of residuals (e.g. sludge); and;
- 3) facility or site status and changes of that status. These reporting and record keeping requirements are based on state and federal regulatory provisions.

Minimum effluent sampling and reporting requirements are outlined throughout MDNR's regulations located in 10 CSR 20-7.015 and vary based upon the receiving water, design flow, type of treatment and, in some cases, on enforcement action. The provisions of Missouri's Effluent Regulations provide guidance for the development of relatively standardized schedules of monitoring and subsequent reporting and also allow permit writer discretion. Facilities also may be required to sample and report the characteristics of stormwater and other periodic discharges. Monitoring should be based on the potential water quality effect and volume of the

discharge. The permit writer determines sampling and reporting frequency for the monitoring of discharges related to precipitation events or irregular wastewater releases.

Standard report forms have been developed for the various types of discharges from facilities. These include the:

- Monthly Monitoring Report for larger, publicly owned, domestic wastewater treatment facilities;
- NPDES Monitoring Report for non-municipal domestic wastewater discharges; and
- Whole effluent toxicity testing for compliance biomonitoring.

In addition, MDNR is able to develop a site-specific monitoring report on behalf of the permittee or the permittee can develop a site-specific monitoring report and obtain approval from the department to use the form as their official form. Industrial facilities can utilize or modify a domestic wastewater monitoring report, or report information about their discharges on a self-developed form approved by MDNR. Permittees are also required to report information related to facility operations and the management of residuals, including the land application or other disposal of wastewater and sludge (biosolids). These requirements are also based on provisions of the Permit and Effluent Regulations and Water Quality Standards. Most of these provisions are also reflected in the Standard and Special Conditions for NPDES Permits.

The monthly monitoring report form for larger POTWs requires submission of operational control parameters. Less detailed operational information for non-municipal wastewater facilities must be reported on an annual basis. No-discharge permit facilities must report, at a minimum, about the amounts of wastewater that is land applied, storage lagoon characteristics, weather conditions in particular precipitation amounts, sludge disposal practices, and information about the soils and crops grown at irrigation sites. The various sections of Forms S, SC and SD require detailed information about most aspects of domestic and industrial sludge (biosolids) management and disposal.

Facilities are required to report to MDNR information about:

- Changes in which officials of an organization can submit applications and reports to the department;
- Local planning and zoning agency notifications about construction permit projects;
- Planned physical alterations of the facility;
- Anticipated noncompliance;
- Transfers of the permit to another person or organization;
- Conformance with compliance schedule milestones;
- Noncompliance that endangers human health or the environment within 24 hours of the event;
- Noncompliance related to unanticipated bypasses and plant upsets within 24 hours of the event;
- Violations of maximum daily effluent limits for selected pollutants within 24 hours of the event if listed in the permit;
- All other noncompliance at the time the regular discharge monitoring report is filed; and

- If a POTW will receive any new introduction of pollutants or substantial change in nondomestic pollutants already being received at the facility.

MDNRs regulatory provisions related to these reporting requirements are located in 10 CSR 20-6.010(2)(D), (4)(I), (7)(C), (8)(A)5, 6 and 9. These state regulatory provisions are derived from various federal regulations, including 40 CFR 122.41(l), 122.44(g) and 122.48.

E. Standard and Special Conditions

Federal regulations at 40 CFR 122.41 require that all NPDES permits, including NPDES general permits, contain an enumerated list of “standard” permit conditions. Further, the regulations at 40 CFR 122.42 require that NPDES permits for certain categories of dischargers must contain additional standard conditions. Permitting authorities must include these conditions in NPDES permits and may not alter or omit any standard condition, unless such alteration or omission results in a requirement more stringent than required by the federal regulations. All of the permits and fact sheets reviewed appropriately used and described the Standard and Special Conditions.

In addition to standard permit conditions, permits may also contain additional requirements that are unique to a particular permittee or discharger. These case-specific requirements are generally referred to as “special conditions.” Special conditions might include requirements such as: additional monitoring or special studies such as pollutant management plan or a mercury minimization plan; best management practices [see 40 CFR 122.44(k)], or permit compliance schedules [see 40 CFR 122.47]. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

MDNR utilizes Federal regulations 40 CFR 122.41 as the basis for their Missouri Standard Conditions for NPDES Permits. They have three sets of Standard Conditions. Part I is a set of “General Conditions” and is included in all permits: this is equivalent to the standard conditions set out in 40 CFR 122.41. The Part II are the Special Conditions for Publicly Owned Treatment Works (POTW) with Major Contributing Industries. Part III is for Sludge and Biosolids from Domestic Wastewater Treatment Facilities.

Standard Conditions for NPDES Permits (Part I, Section A) discuss the conditions for Sampling, Monitoring and Recording. Discharge Monitoring Reports can be required on a monthly, quarterly, or annual basis and operating permits can require several monitoring and reporting frequencies within a single operating permit. Reporting due dates are based upon the issuance date of the permit. The NPDES Standard Conditions also specify the record keeping (records retention) requirements for permittees. Records related to effluent quality, facility status, compliance schedule information, notifications of noncompliance and bypassing should be retained by the facility for a minimum of three years (Standard Conditions, Part I-Section A-5.). Records related to sludge (biosolids) management must be retained for a period of five years (See Standard Conditions, Part I-Section A-5.). NPDES Standard Conditions require permittees to keep facility records on-site or at another designated location so that they can be made available upon inspection.

During the 2010 PQR, the EPA found that there were omissions of federal standard conditions that needed to be in the General Conditions. Listed below are the items that were noted:

- The Bypass provisions are less stringent than the federal regulations. There is no “duty to comply” provision.
- There is no “duty to mitigate” provision.
- There is no “need to halt or reduce activity not a defense” provision.

On November 1, 2013, MDNR revised their Standard Conditions Part I to match Federal definitions for the above stated provisions.

MDNR’s Special conditions in permits are designed to provide an additional measure of control for the reduction of discharges of pollutants to waters of the state. Some reasons to use special conditions in a permit include the following:

- 1) To incorporate preventative requirements such as Best Management Practices (BMP);
- 2) To address possible changes to processes or raw materials that may affect effluent characteristics;
- 3) To incorporate compliance schedules to provide the time necessary to comply with permit conditions;
- 4) To incorporate other requirements such as pretreatment or sludge disposal;
- 5) To impose requirements to conduct special studies such as ambient stream sediment studies, mixing or mixing zone studies, pollutant reduction evaluations, etc.

The group of seven basic special conditions (which MDNR refers to as the “Simple Seven”) is typically used in permits for publicly owned treatment works (POTWs) and private domestic wastewater treatment plants. The seven special conditions address:

1. Reopening and modifying the permit to incorporate new effluent limitations to reflect results of waste load allocations, toxicity studies, 303(d) studies and TMDLs;
2. Marking outfalls in the field;
3. Connection to area-wide treatment systems;
4. Changes in discharge of toxic substances;
5. Reporting as no-discharge when this occurs;
6. Fully complying with the Water Quality Standards, including the General Criteria; and
7. Sludge and biosolids use for domestic wastewater facilities.

Special studies and additional monitoring requirements that may be included under the Special Conditions of a permit are generally used to supplement numeric effluent limits or support future permit development activities. Examples of types of special studies include:

- 1) Treatability studies, when treatability information is lacking for a pollutant or pollutants that would prohibit a permit writer from developing defensible technology-based limits. Treatability studies can also be required when the permit writer is not completely confident that a facility is able to comply with an effluent limit.
- 2) Toxicity identification evaluation/Toxicity reduction evaluation (TIE/TRE), required for facilities for which wastewater discharges are found to be toxic as a result of whole effluent toxicity (WET) test. The purpose of these evaluations is to identify and control the sources of toxicity in an effluent.

- 3) Mixing or mixing zone studies are used to assist in determining the allowable ambient mixing that can be applied when developing water quality based effluent limits.
- 4) Sediment monitoring may be used if the permit writer suspects that pollutants contained in wastewater discharges accumulate in the sediments of the receiving water.
- 5) Bioconcentration studies are used to determine whether pollutants contained in wastewater discharges bioaccumulate in aquatic organisms. These types of studies are usually recommended when water quality based effluent limits for pollutants that bioaccumulate are established below analytical detection levels. When establishing special conditions, the permit writer must ensure that any particular requirements related to the study (e.g., sampling or analytical procedures) are specified in the permit condition. In addition, the permit writer must establish a reasonable schedule for completion and submission of the study or monitoring program. If the anticipated schedule is longer than 6 months to 1 year, then it is recommended that the permit writer require that the facility provide an interim progress report.

In accord with 40 CFR 122.2 Definitions, BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States and the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs are measures to prevent or mitigate water pollution for sources associated with agricultural, municipal, commercial and industrial processes and wastewater treatment. BMPs also apply to stormwater sources and permits and land disturbance activities.

MDNR includes Best Management Practices as special conditions when:

- 1) Numeric limitations are infeasible;
- 2) Chemical analyses are inappropriate or impossible;
- 3) A history of leaks and spills exist or housekeeping is sloppy;
- 4) A complex facility lacks toxic pollutant data; and
- 5) Other discharge control options are prohibitively expensive.

The permit writer may use a special condition that requires the permittee to develop, implement, and reevaluate its own BMP for the facility. To select a specific BMP, the permit writer must:

- 1) Determine the processes that apply;
- 2) Evaluate whether the BMP would help to achieve the environmental objectives; and
- 3) Use examples from other permits, pollution prevention sources, or the EPA guidance documents.

BMP plans can be submitted for review by the regulatory agency but are usually kept on-site and made available upon request. If a BMP is required, it should be completed within six months and implemented within twelve months of permit issuance.

Pollution prevention has been shown to reduce costs as well as pollution risks through source reduction and recycling techniques. The Pollution Prevention Act of 1990 established a national policy for a hierarchy of waste management:

- 1) Pollution should be prevented or reduced at the source, whenever feasible;

- 2) Pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible;
- 3) Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner; and
- 4) Disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

These should be viewed as establishing a set of preferences, rather than a requirement. But the waste management hierarchy as national policy implies that openness to and consideration of pollution prevention practices should be routine in permitting.

The Pollution Prevention Act emphasizes that pollution prevention means source reduction and defines source reduction as any practice that:

- 1) Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal;
- 2) Reduces the threats to public health and the environment associated with the release of hazardous substances, pollutants, or contaminants; and
- 3) Increases the efficiency of using raw materials, energy, water, or other resources, or protects natural resources by conservation.

Pollution prevention includes the Best Management Practices (BMPs) which have traditionally focused on good housekeeping measures and good management techniques that attempt to avoid contact between pollutants and water as a result of leaks, spills and improper waste disposal.

However, BMPs may include production modifications, operational changes, material substitutions, material and water conservation, toxics use reduction, internal or external reuse of wastes and other such measures. Pollution prevention practices are frequently described through examples that primarily relate to industrial settings. However, source reduction is also applicable in agricultural operations, domestic wastewater treatment, drinking water treatment, stormwater control programs, land disturbance and other activities.

MNDR permit writers may include schedules of compliance to allow permittees additional time to achieve compliance. Schedules must require compliance as soon as possible, but may not extend the date for final compliance beyond compliance dates established by federal or state law or regulation. If the schedule exceeds one year from date of permit issuance, the schedule shall set interim dates for requirements or progress reports.

Examples of situations where compliance schedules may be appropriate include:

- 1) Pretreatment program development;
- 2) New or revised effluent regulations;
- 3) New or revised water quality standards;
- 4) Best Management Practices (BMP) development and implementation; and
- 5) Stormwater, CSO and/or SSO control program development and/or implementation.

In situations where the permittee will be unable to meet permit conditions, and where a compliance schedule is not allowed, the facility should be referred to the WPP's Enforcement Section for appropriate action.

F. Administrative Process

The administrative process includes documenting the basis of all permit decisions (40 CFR 124.5 and 40 CFR 124.6); coordinating the EPA and state review of the draft (or proposed) permit (40 CFR 123.44); providing public notice (40 CFR 124.10); conducting hearings if appropriate (40 CFR 124.11 and 40 CFR 124.12); responding to public comments (40 CFR 124.17); and, modifying a permit (if necessary) after issuance (40 CFR 124.5). MDNRs permitting procedures include all of these required components. Draft permits along with their corresponding factsheets and/or statement of basis are placed on the internet for the public to view and make comments. Additional information regarding administrative processes can be found under the section Universe and Permit Issuance. All of the permits reviewed appropriately followed the administrative process regarding public notice of the permit and considering public comments received during the public comment period.

MDNR's permit writer will check to make sure all required signatures are on the transmittal sheet and then will enter the following data into MoCWIS:

- a. Effective date
- b. Issuance date
- c. Expiration date

Next the permit writer will review the permit details in MOCWIS, enter the dates into the customized DMRs and I/I reports, and then issue permit in MOCWIS. The permit writer will generate permit cover letters from Reports in MOCWIS, then merge the final permit with a copy of the application and save for weekly issuance to their website.

G. Administrative Record

The administrative record is the foundation that supports the NPDES permit. If the EPA issues the permit, 40 CFR 124.9 identifies the required content of the administrative record for a draft permit and 40 CFR 124.18 identifies the requirements for a final permit. Authorized state programs should have equivalent documentation. The record should contain the necessary documentation to justify permit conditions. At a minimum, the administrative record for a permit should contain the permit application and supporting data; draft permit; fact sheet or statement of basis; all items cited in the statement of basis or fact sheet including calculations used to derive the permit limitations; meeting reports; correspondence between the applicant and regulatory personnel; all other items supporting the file; final response to comments; and, for new sources where the EPA issues the permit, any environmental assessment, environmental impact statement, or finding of no significant impact.

Current regulations require that fact sheets include information regarding the type of facility or activity permitted, the type and quantity of pollutants discharged, the technical, statutory, and regulatory basis for permit conditions, the basis and calculations for effluent limits and conditions, the reasons for application of certain specific limits, rationales for variances or

alternatives, contact information, and procedures for issuing the final permit. Generally, the administrative record includes the permit application, the draft permit, any fact sheet or statement of basis, documents cited in the fact sheet or statement of basis, and other documents contained in the supporting file for the permit. The permits review included a review of the permits file and permitting supporting documents making up the administrative record. A review of these records indicated the state followed all of the administrative procedures as required and described in this report.

MDNRs fact sheets are very complete and provide a great deal of information. The format of the fact sheet helps permit writers build a good permit and creates a transparent record for the permittee and the public. The MDNR fact sheet is a checklist/template used by permit writers in both documenting permit derivation and as a tool to help write the permit. Fact sheets include:

- Location information including Lat/Long and UTM data
- Complete receiving stream information with designated uses identified
- Calculations for TBELs and WQBEL are shown for each parameter in the permit

1. Documentation of Effluent Limitations

Permit records for POTWs and industrial facilities should contain comprehensive documentation of the development of all effluent limitations. Technology-based effluent limits should include assessment of applicable standards, data used in developing effluent limitations, and actual calculations used to develop effluent limitations. The procedures implemented for determining the need for water quality-based effluent limitations as well as the procedures explaining the basis for establishing, or for not establishing, water quality-based effluent limitations should be clear and straight forward. The permit writer should adequately document changes from the previous permit, ensure draft and final limitations match (unless the basis for a change is documented), and include all supporting documentation in the permit file.

MDNR permits, provide the documentation required by regulation. Facility descriptions are usually complete and clearly written. The permit records contain facility location, maps of facilities and receiving streams, and flow maps for industrial facilities. Receiving streams are listed and applicable levels of protection are described in the permit rationale.

Permit writers make the assessment of applicable SIC Code and determine if an Effluent Limitation Guideline applies. The permit writer creates a list of pollutants of concern, and the Waste Load Allocations (WLAs) are calculated by Water Quality specialists. The WLA procedures are highly regimented and the approaches are established in rule referenced procedures. The permit writer then develops the permit using the Technology-based Effluent Limits (TBEL) and Water Quality-based Effluent Limits (WQBEL) calculations. Fact sheets detail the limited parameters with a pollutant by pollutant discussion of the rationale for the limit (or monitoring requirement). Fact sheets contain a description of any changes in limits as permits are renewed with a reason for the new limit.

Permit limits for POTWs and industrial facilities are calculated in units consistent with the applicable effluent guidelines. Permit limits are stated in term of mass and concentration for all parameters (except pH and temperature).

During the PQR the following was found with regard to permit documentation. Listed below are some of the individual permit that were reviewed and that have been selected as examples:

Troy, MO – MO-0054623

The “old” Troy WWTP is a pair of package plants operated in parallel. A new plant is being constructed to accommodate the growth of the city. The facility has had a history of non-compliance and has problems with Inflow and Infiltration (I&I), overflows, violations of metal and ammonia limits, and washout of sludge into the receiving stream. The facility was in compliance with WET limits set in the permit.

MDNR sent out three letters asking for a complete application (3/26/10, 4/4/10, and 7/2/10). The letters indicated that the application was missing maps, a process flow diagram, legal certifications, and Expanded Effluent Testing Data (monitoring of the EPA Priority Pollutants). MDNR did get a complete application albeit with only one Priority Pollutant scan. A part of the problem was the move of operation of the facility from a contract operator back to the City of Troy.

The permit removed a Zn limit without a discussion of allowable backsliding. There was a rationale for the removal, but it was not documented in the fact sheet. Limits for Cu and Pb were kept in the permit. The record was clear that a sole industrial user, Bodine Aluminum, had switched discharge to the new Troy WWTP, and that the DMRs showed no reasonable potential. It is notable that Troy’s consultant commented that all the metals limits should be removed, or if retained, they should be allowed a compliance schedule. MDNR denied both requests.

The Troy permit contains WQBEL for BOD, TSS, TRC, E. coli, and several metals. Calculations for each are described in the fact sheet. Acute WET limits are included in the permit. The “002” outfall has been eliminated from the permit. General criteria and narrative “free from” criteria are listed in the special conditions of the permit. Sludge requirements are cited in the permit as a standard condition (Part III). As an update, the City of Troy has decided to build the new plant with a larger capacity, and the existing older facility will be abandoned.

Secondary treatment limits were correct and expressed in proper units. Calculations of WQBELs were done correctly and documented in the fact sheet. Descriptions of location, the receiving stream, beneficial uses, and facility discharge were all complete. Standard conditions were the “Part I” conditions cited on the MDNR website.

Veolia Energy, Kansas City - MO-0004847

The Veolia facility is a “steam loop” serving downtown Kansas City. A steam loop is a form of power delivery in which the power plant, in this case coal fired, provides steam for heating the buildings of a city rather than having boilers in each building. The Veolia plant is much like a standard steam-electric power plant in terms of discharges. Wastewater from the facility is discharged to the city sewers. Only non-contact cooling water is removed and then discharged back to the Missouri River.

The fact sheet indicated that 316(b) needed to be considered and that BPJ limits were applicable, but did not make a distinct finding.-The permit writer used the MDNR standardized methods for calculating heat limits. The limits were calculated properly. The permit used real time stream flows as a parameter, but did not specify the stream gage to be used for the flow measurement.

BASF Hannibal Plant - MO-0001716

BASF manufactures various agricultural chemicals and intermediates to pesticide active ingredients. Most waste is incinerated onsite.

The permit was issued without changes because the production levels had not changed. BASF has asked for permit limits of one half of that allowed by the effluent guidelines as a driver for maximum treatment. The prior permit was developed by the EPA to assist MDNR.

A major concern with the permit was the lack of limits for chromium VI. In 2010, BASF discovered high amounts of chromium VI in the effluent discharge from Outfall 001. Discharge levels for chromium VI were as high as 5100 µ/L, when the acute Water Quality Standard is 15 µ/L. The source of the chromium was breakdown of a chromium-based refractory in the incinerators, with the heat of incineration driving the oxidation to the chromium VI state. The refractory was replaced, and the problem was resolved, but the permit did not contain limits for Chromium. Since the chromium issue was handled by enforcement, it was not clear that the permit writer had knowledge of the incident.

Missouri-American Water Company, Jefferson City - MO-0004600

The Jefferson City WTP is one of several facilities on the Missouri and Mississippi Rivers that discharge lime sludge to the river without treatment. The permit was issued with a companion order with a schedule for studies to consider the factors included in setting site specific BPJ technology-based permit limits. Solids discharges are authorized by the permit, but the permit can be reopened when a final decision is made on the appropriate technology limits.

A concern with the permit was with the quality of the permit application accepted by the state. The flow diagram submitted by the permittee showed the process for water treatment, but did not even indicate where waste streams (river solids, lime sludge, and backwash water were leaving the process. There was no description in the application of discharge patterns (sludge discharge cycles, etc.) The application had monitoring for only one sample. The single sample had only 23 mg/L TSS, so discharge of lime sludge discharge was not even monitored.

A complete application for an industrial discharger requires a “line drawing of water flow through the facility with a water balance” for those flows, a description of “frequency, duration, and flow rate” for intermittent flows, and must document effluent characteristics through representative monitoring. See 40 CFR 122.21(g)(2,3,4,7).

While the application was incomplete, the companion order will fill in the missing information. MDNR should require complete applications with representative monitoring, and reissued permits should contain representative monitoring.

Estates of D'Monaco - MO-0135259

This permit is for a new, small development (population 150) near Table Rock Lake. Even though the permit is for a very small facility, it was written with very good detail including water quality-based limits for BOD, TSS, E. coli, TRC, phosphorus, and ammonia (aluminum and iron are also limited if they are used as treatment chemicals).

The quality of this permit and fact sheet is an example of good documentation by MDNR. Even though this is a small facility, the fact sheet template used by MDNR was filled out completely and documented the rationale for all the permit limits.

City of Drexel WWTF-South - MO-0023663

This permit is for renewal of a POTW, with a design flow of 50,000 gallons per day. The permit was issued February 2013 and given an expiration date of December 2017. The less than five year expiration date was given in order for the facility to meet permit synchronization. During the review it was discovered that not all of the sludge information was provided and that pH changed from 6.0 SU to 6.54 SU; however, on the factsheet the antibacksliding provision was not marked correctly. The permit did include appropriate monitoring requirements, and standard and special conditions.

JCPSD, Mirasol WWTF - MO-0134147

Jefferson County Public Sewer District is a minor POTW that has a design flow of 150,000 gallons per day. During the review, the ammonia parameter was changed to monitoring only. The permit writer conducted a reasonable potential analysis and showed the results in the factsheet; which resulted in a no reasonable potential. However, on the factsheet the antibacksliding provision was not marked correctly. The permit did include appropriate monitoring requirements, and standard and special conditions.

Brandco Investments, LLC - MO-0088072

This permit is for renewal of a minor non-POTW domestic facility. The facility has a design flow of 92,126 gallons per day and was issued July 2013 with an expiration date of September 2017. During the review it was discovered that the pH changed from 6.0 SU to 6.5 SU; however, on the factsheet the antibacksliding provision was not marked correctly. The permit was given a schedule of compliance for the facility to meet new ammonia limits and six months to obtain an operator with the correct wastewater license. The previous copy of the permit was not found in the facility file during the time of the review. The permit did include appropriate monitoring requirements, and standard and special conditions.

SRG Global Inc. - MO-0001180

SRG Global Inc. engages in electroplating, injection molding, and surface coating of plastic automotive parts. It is an NPDES major discharger, with permitted stormwater discharges. There were a number of problems noted during the review with the permit documentation. The treatment train for the facility was not documented which could make bypass determinations difficult. Cracks in floor through which spills, leaks, etc, had seeped, are called "bypasses" which is not a conventional understanding of bypass. Limits for Silver had backslid from the previous permit, but it was not clear if it was allowed backsliding. The factsheet did not explain the basis for how TBELs were calculated (i.e. actual production, or other parameters).

Platte City - MO- 0026298

This facility is waste water treatment plant for Platte City, MO. The facility is a major with a design flow of 2 MGD. A number of problems were noted when reviewing the fact sheet. It appeared that reasonable potential analysis should have been conducted for CN due to data submitted with the application, but there was no record that RP for CN had been performed. There were not 3 priority pollutant scans and there were just 2 WET tests. The fact sheet says that all the limits are at least as stringent as the previous permit, but there were some months where the ammonia limits were higher.

Carthage WWTF - MO-0039136

This facility is waste water treatment plant for the City of Carthage, MO. The facility is a major with a design flow of 7 MGD. According to the state this permit had been worked on by a number of permit writers over a period of time, and as a result the factsheet had a number statements which were in disagreement (including tables of limits which didn't match). For example, the factsheet indicated that the permit contains a schedule of compliance for certain metals, but the permit only contains final limits and doesn't have a schedule of compliance. The factsheet also indicates the permit will contain CMOM requirements, but it doesn't. Backsliding issue are not addressed properly (e.g. FS says that there is no backsliding, but the daily max limit for CN is higher than in the previous permit). The factsheet indicates that the receiving stream is impaired for E. coli, but there is no indication whether there has been a TMDL established. It appears that RP analysis for ammonia should have been performed but there is no indication that it was and the permit just requires monitoring for ammonia.

H. National Topic Areas

National topic areas are aspects of the NPDES permit program that warrant review based on the specific requirements applicable to the selected topic areas. These topic areas have been determined to be important on a national scale. National topic areas are reviewed for all state PQRs. The national topics areas are: nutrients, pesticides, pretreatment and stormwater.

1. Nutrients

For more than a decade, both nitrogen and phosphorus pollution has consistently ranked as one of the top causes of degradation of surface waters in the U.S. Since 1998, The EPA has worked at reducing the levels and impacts of nutrient pollution. A key part in this effort has been the support the EPA has provided to States to encourage the development, adoption and implementation of numeric nutrient criteria as part of their water quality standards (see the EPA's *National Strategy for the Development of Regional Nutrient Criteria*). In a 2011 memo to the EPA regions titled *Working in Partnerships with States to Address Nitrogen and Phosphorus Pollution through use of a Framework for State Nutrient Reductions*, the Agency announced a framework for managing nitrogen and phosphorus pollution that, in part, relies on the use of NPDES permits to reduce nutrient loading in targeted or priority watersheds. To assess how nutrients are addressed in the MDNRs NPDES program, the EPA Region 7 reviewed a representative permit and held discussions with MDNR staff.

MDNR has a technology-based phosphorus limit (1 mg/L Daily Maximum, 0.5 mg/L Monthly Average) for discharges to Lake Taneycomo and its' tributaries. 10 CSR 20-7.015(3)(E). In addition, MDNR has recently promulgated numeric criteria for nitrogen (TN), phosphorus (TP), and chlorophyll A for 25 lakes. Each lake has site specific criteria for each of the three parameters. MDNR intends to continue work on criteria for lakes, and then work on running waters. There is a real need to catch up on criteria for toxics, and this is a competing priority. The new ammonia criteria, based on toxicity, are another consideration.

MDNR is developing a comprehensive process for reducing nutrients in the streams of Missouri. The plan is being developed with a five year window and an adaptive management approach. MDNR is using different strategies for different sectors, and is building approaches for each. Even these larger sectors consist of differing sources. Agriculture includes row crops, pasture,

and animal husbandry. MDNR is aware that the options for nutrient reductions are much different for small cities and the major facilities where economy of scale can come into play. Urban non-point sources can be minimized by a large variety of activities and become very site specific.

The Nutrient Management Reduction Committee has representatives knowledgeable in agriculture, point source discharges, and stormwater. Meeting attendees have included large municipalities (St. Louis, Kansas City, Springfield, and Independence) and the Missouri Public Utilities Alliance, representing the smaller cities and towns. Agricultural representatives, such as the Farm Bureau, and several environmental groups have been represented. First round implementation will be based on the “biggest bang for the buck”, focusing on getting the best controls early on and fostering “buy in”.

Agricultural groups have spent funds to support development of early implementation efforts. In addition, the state has worked through existing programs and funding. Missouri has a 0.0005% sales tax for Soil and Water Conservation. Most of that funding goes to 75%/25% match projects for Soil Conservation, which is quite compatible with nutrient reduction goals, but a portion of this funding will go to more nutrient oriented projects.

MDNR is also using existing program structures such as NRCS programs, the Department of Conservation, and the University of Missouri Agricultural Extension.

The format being used is a step-wise process: explain the action, assess the current level of implementation (Ex.-current use of cover crops), and assess a reasonable level of enhanced implementation over the next 5+ years. For each planned action there is a consideration of the potential difficulties and hurdles, and a plan to get past them. The nutrient plan is a bottom-up approach where the MDNR asks: “What can we do now that will drive the most benefit?”

Like other states, MDNR is considering nutrient trading. Trading is new to the state, so there are many policy decisions involved. MDNR would like to set a baseline of proper practice before individuals are eligible to trade. MDNR hopes to release the final plan in the summer of 2014.

MDNR is actively working to improve nutrient controls using proven existing programs. A plan is in the works and implementation will begin soon. MDNR needs to continue development of numeric criteria for nutrients for more of the state’s waters.

The EPA reviewed a number of permits to see how nutrients are controlled through the NPDES process. While there are nutrient criteria for 25 lakes in the state, only a few of these lakes have point source discharges. As an example, the permit for the Estates D’Monaco includes the technology-based phosphorus limits set in MDNR rules for discharges to Table Rock Lake. There are a few permits in southern Missouri that have phosphorus limits based on TMDLs, the most notable example is a permit for Springfield, MO. One facility, Tyson Poultry, is close to the state line, has phosphorus limits based on the downstream Oklahoma WQS.

MDNR does not have nutrient criteria for streams and rivers. The state has not used narrative criteria to drive nutrient limits in NPDES permits.

2. Pesticides

On October 31, 2011, the EPA issued a final NPDES *Pesticide General Permit (PGP) for Discharges from the Application of Pesticides*. This action was in response to a 2009 decision by the U.S. Sixth Circuit Court of Appeals (National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009)) in which the Court vacated the EPA's 2006 Final Rule on Aquatic Pesticides (71 Fed. Reg. 68483, November 27, 2006) and found that point source discharges of biological pesticides and chemical pesticides that leave a residue, into waters of the U.S. were pollutants under the CWA. The federal PGP applies where the EPA is the permitting authority. Approximately 40 authorized state NPDES authorities have issued state pesticide general permits as of November 2011.

On January 7, 2009, the Sixth Circuit Court vacated the EPA's 2006 NPDES Pesticides Rule under a plain language reading of the CWA. National Cotton Council of America v. EPA, 553 F.3d 927 (6th Circuit 2009). The Court held that the CWA unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." In response to this decision, on April 9, 2009, the EPA requested a two-year stay of the mandate to provide the Agency time to develop general permits, to assist NPDES-authorized states to develop their NPDES permits, and to provide outreach and education to the regulated community. On June 8, 2009, the Sixth Circuit Court granted the EPA the two-year stay of the mandate. On March 28, 2011, the U.S. Court of Appeals for the Sixth Circuit granted the EPA's request for an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. The court's decision extended the deadline for when permits would be required from April 9, 2011 to October 31, 2011.

As a result of the Court's decision to vacate the 2006 NPDES Pesticides Rule, NPDES permits are required for discharges of biological pesticides and of chemical pesticides that leave a residue, to waters of the United States. The EPA proposed a draft pesticide general permit on June 4, 2010 to cover certain discharges resulting from pesticide applications. The EPA Regional offices and state NPDES authorities may issue additional general permits or individual permits if needed.

The state drafted the PGP and began holding stakeholder meetings throughout the State. Missouri continues outreach through stakeholder group continuing education, placing meeting minutes online, technical bulletins and a copy of the PGP is online and can be found at <http://www.dnr.mo.gov/env/wpp/permits/pesticide.htm>.

MDNR had no obstacles or barriers in state law restricting the state NPDES permitting authority from fully implementing the NPDES PGP requirement. The Missouri PGP was signed on October 31, 2011 and has a \$150 fee the first year, and a \$95 annual fee.

The final permit aligns closely with the federal PGP and is available to operators for the application of 1) biological pesticides and 2) chemical pesticides which leave a residue (hereinafter collectively "pesticides") that result in a discharge to waters of the United States (U.S.). In addition to a PGP, Missouri has pesticide applicators laws that assist in controlling discharges from pesticide applications at the Missouri Department of Agriculture. The PGP does not supersede nor remove liability for compliance with county and local ordinances or other applicable federal and state laws.

The Missouri PGP is silent on coverage for discharges from pesticide applications that are to Outstanding National Resource Waters (ONRW), impaired waters, shallow wells, and endangered and threatened species and critical habitats. It is also silent on coverage for discharges from pesticide applications that are covered by another permit and discharges that are one half mile from drinking water intake structures. Missouri staff will evaluate these discharges on a case-by-case basis to determine if an individual permit is required for coverage. MDNR has not issued any individual permits for discharges from pesticide applications at this time.

If a permittee meets the threshold criteria in the PGP, they must submit a Notice of Intent (NOI). Missouri has received five (5) NOIs to date. These NOIs are paper submittals and Missouri has plans to develop an electronic system.

The PGP requires annual reporting and a pesticide discharge management plan (PDMP) from permittees who are required to submit a NOI. The permittee must maintain the annual report at the address provided in the application. The PDMP must be maintained on site or at the address provided in the address. Both documents must be made available to state staff upon request. The PGP does not require ambient water quality monitoring because the MDNRs, WPCB's, Watershed Protection Section collects monitoring data and is available upon request.

The PGP does include permitting requirements for discharges associated with declared pest emergencies. A declared pest emergency is an event defined by a federal agency, state, or local government of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on: (1) Significant risk to human health; (2) Significant economic loss; or (3) Significant risk to: (i) Endangered species, (ii) Threatened species, (iii) Beneficial organisms, or (iv) The environment.

MDNR has one primary staff member committed to administering NPDES permits for discharges from pesticide applications and six staff members able to answer questions pertaining to the PGP in the Central Office. In the Regional Offices there are at least 3-4 staff in each office that are able to respond to questions.

Although the current PGP has a reopener clause to address any situation that may arise such as new or modified State of Missouri Statutes or Regulations, effluent limitations, or etc, it is suggested that in the reissued permit the state addresses whether pesticide discharges to special waters (e.g., Outstanding Natural Resource Waters and impaired waters) are addressed differently than Waters of the State. The reissued permit should also address discharges to endangered and threatened species and critical habitats and discharges near drinking water intake structures.

3. Pretreatment

The State of Missouri was authorized to implement the Pretreatment program on June 3, 1981. Individual POTW program approvals primarily occurred in the 1983 through 1985 time period. Since then, eight programs have been granted Inactive status because they lost their industrial base and no longer have SIUs, while ten cities have been required to develop Pretreatment

programs. Currently, there is one city working on developing a program (Gerald). Below is a table of statistics based on answers to questions in the PQR checklist for Pretreatment.

State of Missouri Pretreatment Program at a Glance 2013	
Number of Approved program cities (does not include inactive programs)	46
Number of SIUs in Program cities	521
Number of non-Categorical SIUs in Program Cities	198
Percent with unexpired permits, Dec 31, 2012	100%
Number of Categorical SIUs in Program Cities	323
Percent with unexpired permits, Dec 31, 2012	99%
Number of SIUs in non-approved Cities	Unknown
Number of CIUs in non-approved Cities	26
Number of PCIs/PCAs in FY2012	15
Date State Program updated for Streamlining Regulations	10/30/2012

Program Overview

The MDNR implements its authorized Pretreatment program by splitting duties between the Pretreatment Coordinator in the Jefferson City Central Office and inspectors in the five field offices. In general, the Pretreatment Coordinator is responsible for Pretreatment implementation NPDES permit language, assisting on audits or PCIs, and fulfilling reporting requirements to the EPA Region 7. The Pretreatment Coordinator also receives all annual reports submitted by the Pretreatment Program Cities. All NPDES permits are issued from the Jefferson City office.

The field offices inspect industries outside Pretreatment cities and conduct Pretreatment audits or Pretreatment Compliance Inspections. In general, MDNR does not place much distinction between an audit and a PCI. The goal of the CMS strategy is for each approved Pretreatment city to receive one audit and two PCIs in a five year span. This equates to 138 total Pretreatment inspections for the 46 cities in the five year period, or an annual average of 27.6. In FY2013, MDNR inspected 21 Pretreatment cities while the EPA inspected 3, for a total of 24. However, there are a number of Pretreatment cities that have had significant losses in SIUs and they do not need the same level of oversight as they used to. The MDNR does a good job prioritizing those cities that need a Pretreatment inspection in any given year.

Missouri has recently adopted the Streamlining Pretreatment Regulation Changes of November 14, 2005. The state adopted the EPA regulations by reference on October 30, 2012. Consequently, they have legal authority for both the mandatory regulation changes as well as the optional ones.

As part of the PQR analysis for Pretreatment implementation requirements, 15 permits and fact sheets were selected, eight from Pretreatment program cities, and seven from non-program cities. The non-program cities were chosen because they had an industry discharging to them that was evaluated for the SRF analysis, also done as part of this Program Review. All of the seven non-

program cities reviewed have design flows less than 5 mgd and hence would not be required to develop a program unless specifically required by MDNR.

Pretreatment implementation requirements, whether for program or non-program cities are covered in the STANDARD CONDITIONS section of the city's NPDES permit by referring to the latest version of Part II Standard Conditions, a stand-alone document, and in the Fact Sheet section that addresses whether implementing a Pretreatment program is required.

The fact sheet used for all permits addresses whether a Pretreatment program is needed in the section Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions. There is a brief paragraph that describes what a Pretreatment program is followed by another paragraph that is to be inserted into the permit, if the checkbox is checked to indicate the POTW has an approved Pretreatment program. There is no language that is specified be put in a permit for any POTW that is identified as not having a Pretreatment program.

Permits for Non-Program Cities

The MDNR enumerates the requirements that apply to a city's industrial users in PART II – STANDARD CONDITIONS, which, because it is a stand-alone document, is controlled by creating versions. This ensures that the language will be consistent from one permit to another. For years the requirements were contained in a version that was from 1980, which is prior to the effective date of the General Pretreatment Regulations, and prior to MDNR's authorization to implement the Pretreatment program. Consequently, this version did not adequately capture Pretreatment requirements when they were issued. On May 1, 2013, MDNR modified these PART II – SPECIAL CONDITIONS requirements to capture the elements of the PQR checklist. (Note that they are now called PART II - SPECIAL CONDITIONS although the permit refers to them as PART II – STANDARD CONDITIONS). While six of the seven permits reviewed for non-Pretreatment cities were issued prior to the revised PART II standards, this review did not evaluate the old version but instead focused on the revised May 1, 2013, version since it will be used upon permit reissuance for each facility.

In general, the language in the revised May 1, 2013 version satisfactorily establishes requirements for any non-Pretreatment city to notify the MDNR of all SIUs (SIU as defined by the General Pretreatment Regulations) pursuant to 40 CFR 122.44(j)(1) and 122.21(j)(6). In addition, requirements are established to notify the Department pursuant to 40 CFR 122.42(b) , as soon as practicable, of any new pollutants introduced into the POTW or a substantial change in volume or character of pollutants.

Of the eight non-program city NPDES permits reviewed, seven were issued prior to May 1, 2013. None of these seven contained a statement that MDNR had the authority to reopen and modify the permit to require the development of a Pretreatment program. Despite the absence of such a statement, it has not prohibited MDNR from doing so over eight times in the past ten years. Nevertheless, the Shelbina permit, issued January 1, 2014 contains a statement on page 7 at D. SPECIAL CONDITIONS item 6 d, a statement that allows MDNR to reopen and modify to require Pretreatment program development.

Permits for Pretreatment Program Cities

The eight permits selected for review for the Pretreatment program cities were not chosen at random but were the same eight evaluated for the SRF portion of the MDNR Program Review. As stated in the SRF evaluation, these were chosen from the list of 21 Program cities that either received a PCI or Pretreatment audit in FFY 2013. These POTW permits were reviewed using appropriate questions in the PQR checklist, the completed forms of which are attached. However, while discussing Pretreatment implementation requirements that should be in NPDES permits, MDNR staff requested the EPA review the permits for *all* approved Program cities and identify if the appropriate implementation requirements were present. As this would be far more valuable than just the PQR exercise, the study was made and the following table prepared using NPDES permits and fact sheets (when available) downloaded from the MDNR website.

The table presents all MDNR approved Pretreatment programs including those that are currently classified as inactive. The reason the inactive facilities are included is to discuss language MDNR uses in the NPDES permit to acknowledge that a Pretreatment program exists and that the permit holder can be required to reactivate it.

The table includes each Program city and the NPDES permit number of its wastewater treatment plant. For those cities with more than one wastewater treatment plant, the permit number of the principle plant is shown. This is the permit number that must contain the implementation language and the permit number tracked in ICIS for implementation purposes. Also shown is the city’s status (e.g., active or is inactive) and the current permit expiration date (at the time of the PQR Program evaluation). Twenty-two permits out of 54 were found to be expired and they appear in red.

A review of ICIS indicates that MDNR has a number of facilities identified as PRET=Y that should not be. For a POTW with multiple wastewater treatment plants, St. Louis MSD for instance, only the principle plant should be so designated as PRET=Y. All of the other WWTPs that are part of the MSD POTW should be designated as PRET = C. Without the correct designation in the PRET field, the proper number of approved Pretreatment Programs cannot be accurately determined. The MDNR needs to correct these mis-designations.

Typical Pretreatment program implementation language states: “The permittee shall implement its approved pretreatment program in accordance with the requirements of 40 CFR Part 403. The approved program is hereby incorporated by reference.” Because implementation is by reference to 40 CFR Part 403, all of the PQR provisions are automatically covered. Once MDNR passed the Streamlining Regulations by reference, the Pretreatment implementation language began to refer to 10 CSR 20-6.100 rather than 40 CFR Part 403. This is equally valid.

Missouri FFY2013 Program Review - Cities with Pretreatment Programs							
#	CITY	NPDES No.	Status	Exp. Date	implementation	reporting	local limits
1	AURORA	MO0036757	inactive	4/3/2016	See Note 1	NA	NA

Missouri FFY2013 Program Review - Cities with Pretreatment Programs

#	CITY	NPDES No.	Status	Exp. Date	implementation	reporting	local limits
2	BOONVILLE	MO0040738		2/10/2015	D.11., page 9	D.11., page 9	D.11., page 9
3	CAMDENTON	MO0106399	inactive	8/19/2015	See Note 2	NA	NA
4	CAPE GIRARDEAU	MO0050580		4/1/2017	D.9., page 7	D.9., page 7	D.10., page 7
5	CARROLLTON	MO0096318	inactive	3/22/2012	See Note 3	NA	NA
6	CARTHAGE	MO0039136		3/31/2018	D.19., page 6	D.19., page 6	D.19., page 6
7	CASSVILLE	MO0042579		3/24/2016	D.9., page 7	D.10., page 7	No
8	CENTRALIA	MO0028789	inactive	12/31/2013	See Note 3	No	No
9	CHILLICOTHE	MO0108227		9/18/2013	D.9., page 8	D.9., page 8	No
10	COLUMBIA	MO0097837		9/23/2015	D.8., page 11	D.8., page 11	No
11	CUBA	MO0094919		8/24/2011	D.8., page 4	D.9., page 4-5	No
12	FARMINGTON	MO0040312		5/19/2016	No, See Note 4	No	No
13	HANNIBAL	MO0093513		12/31/2013	D.9., page 8	D.9., page 8	D.10., page 9
14	INDEPENDENCE	MO0089681		3/30/2014	D.7., page 6	D.8., page 6	D.9., page 6
15	JACKSON	MO0022853		7/9/2014	D.9., page 7	D.10., page 7	No
16	JEFFERSON CITY	MO0094846		12/11/2016	No	No	No
17	JOPLIN	MO0103349		1/25/2012	D.11. page 12	No	No
18	KANSAS CITY	MO0024911		11/15/2016	D.10., page 8	D.10., page 8	No
19	KIRKSVILLE	MO0049506	inactive	2/9/2011	C.7., page 3, See Note 5	C.9., page 4	C.8., page 3
20	LAMAR	MO0044172		10/2/2013	D.9., page 5	D.10., page 5	D.11., page 5
21	LEBANON	MO0089010		1/3/2017	D.15., page 8	D.15., page 8	D.13, page 6
22	LITTLE BLUE VAL	MO0101087		7/27/2015	D.8. page 7	D. 9. page 7	No
23	MACON	MO0023221		4/3/2016	D.10. page 5	D. 10. page 5	D.10. page 5
24	MALDEN	MO0100030	inactive	3/9/2011	See Note 6	NA	NA
25	MARSHALL	MO0032883		11/7/2016	D.11. page 8	D.11. page 8	No
26	MARSHFIELD	MO0040843		12/9/2015	D.10. page 7	D.10. page 7	E.2., page 11
27	MARYVILLE	MO0033286		2/12/2014	D.11, page 8	D.11., page 8	No
28	MEXICO	MO0036242		10/8/2014	D.10, page 5	D.11. page 5	No
29	MOBERLY	MO0117960		12/29/2010	No	No	No
30	MONETT	MO0021440		8/21/2013	E.10, page 8	E.12., page 8	E.11. page 8
31	MONROE CITY	MO0055379		3/31/2014	D.10., page 6	D.10. page 6	No
32	MOUNT VERNON	MO0022381	inactive	1/29/2014	See Note 7	NA	NA
33	N. KANSAS CITY	MO0107956		6/30/1993	See Note 8	See Notes	See Notes
34	NEOSHO	MO0039926		4/21/2016	D.9. page 21	D.9. page 21	No
35	NEPSD	MO0128490		3/17/2016	D.10., page8	D.10,page 8	No
36	NEVADA	MO0089109		5/12/2016	D.10., page 8	D.10., page 8	No
37	OFALLON	MO0028720		12/11/2013	C.15., page 10	C.16., page 10	C.17., page 10
38	PERRYVILLE	MO0051144		3/19/2014	D.10., page 7	D.11. page 7	No
39	POPLAR BLUFF	MO0043648		12/10/2014	D.8., page 9	D.9. page 9	No
40	ROLLA	MO0050652	inactive	4/30/2018	See Note 9	NA	NA
41	SEDALIA	MO0023027		4/2/2014	D.9. page 6	D.9. page 6	No
42	SIKESTON	MO0035009		3/31/2017	D.20. page 10	D.20. page10	D.20 page 10
43	SPRINGFIELD	MO0049522		6/30/2016	D.13, page 9	D.13. page 9	No
44	ST. CHARLES	MO0058351		2/12/2014	D. 10. page 8	D.10. page 8	No
45	ST. CLAIR	MO0099465		2/9/2016	D.9. page 6	D.9. page 6	No
46	ST. JOSEPH	MO0023043		6/18/2014	D.9. page 7	D.10. page 7	No

Missouri FFY2013 Program Review - Cities with Pretreatment Programs

#	CITY	NPDES No.	Status	Exp. Date	implementation	reporting	local limits
47	ST. LOUIS	MO0025178		1/8/2017	D.13, page 10	D.13., page 10	D.18., page 11
48	ST. PETERS	MO0030970		5/12/2016	See Note 10	No	No
49	SULLIVAN	MO0104736		4/10/2013	See Note 11	E.11. page 9	E.12, page9
50	TRENTON	MO0039748		6/30/2014	D. 22. page 8	D.22. page 8	No
51	UNION	MO0025283		6/30/2015	No, See Note 12	No	No
52	WARRENSBURG	MO0055905		12/3/2014	D.11, page 4, 10csr	D.11., page 4	D.11., page 5
53	WASHINGTON	MO0025810		1/17/2013	D.9, page4	D.10, page 4	No
54	WENTZVILLE	MO0093599		1/31/2019	No, See Note 12	No	No

No. of Active Programs: 46 Permit Status:
 Expired: 22
 Active: 32

Notes to the Table

1. Aurora was placed in inactive status in the late 1980's most likely before the requirement to modify its approved Pretreatment program to address the PIRT and DSS regulation changes. Consequently, it would be more practical to require them to develop a new Pretreatment program rather than reactivate its approved one. The current permit's fact sheet does not recognize that an approved program exists and states that no Pretreatment program is needed. There is no reactivation language in the permit.
2. Camdenton was originally required to implement an approved Pretreatment program under NPDES permit number MO0048577, which no longer exists. The Pretreatment program is now inactive. There is no reactivation language in the permit.
3. Carrollton and Centralia were placed in inactive status in the mid 1980's before the requirement to modify their approved Pretreatment programs to address the PIRT and DSS regulation changes. Consequently, it would be more practical to require them to develop a new Pretreatment program rather than reactivate their approved one. There is no reactivation language in their permit.
4. Farmington's permit requires them to develop a Pretreatment program under the section SCHEDULE OF COMPLIANCE on page 11. Section E.1. requires submittal of a program within one year of permit issuance and that the permit will be reopened to require implementation of the approved Program once approved. Section E.2. requires implementation two years (May 19, 2013) after the permit's effective date (May 20, 2011). The city's Pretreatment program was approved on May 15, 2013. The permit has not yet been reopened to require implementation.
5. Kirksville was granted inactive status on October 17, 2013. Its NPDES permit is expired but when reissued will need to have clause that requires reactivation upon notice by MDNR.

6. Malden's requirement for program implementation was originally established in NPDES permit MO002288. The city currently discharges under permit number MO0100030. This permit was placed in inactive status within the last 10 years and will need to address the Streamlining regulations if reactivated. There is no reactivation language in its permit.
7. Mount Vernon's permit does not have a statement that recognizes this permit as inactive, nor does its fact sheet. It was placed in inactive status in the late 1980's prior to MDNR's adoption of the PIRT and DSS regulation changes. It would be more efficient to require a new program be developed rather than the old program be reactivated if new industry moved into the city.
8. North Kansas City obtained its approved Pretreatment program in the 1980's when that city had its own wastewater treatment plant. Since then, the plant has been decommissioned and the city now discharges to Kansas City, Missouri. North Kansas City, however, wanted to retain its Pretreatment program so the program implementation requirement was written into its water treatment plant's NPDES permit, MO0107956. This permit has been expired since June 30, 1993 so it was not available on the MDNR website for review.
9. Rolla's permit at SPECIAL CONDITIONS section E.10. states that the city's Pretreatment program is inactive and requires Rolla to notify MDNR 60 days prior to any new industry commencing discharge so that the permit can be reopened and modified. The fact sheet also states that the program is inactive.
10. St. Peters' permit contains language at SCHEDULE OF COMPLIANCE (section E.1) to develop a Pretreatment program within one year (5/12/12) of issuance of the permit (5/13/11), and that upon approval the permit will be opened and modified to require implementation. Section E.2. states that implementation shall commence two years (5/12/13) after permit issuance. The city's program was approved by MDNR on July 1, 2013.
11. Sullivan's permit contains requirements in D. SCHEDULE OF COMPLIANCE (p.7) to submit a program for approval by May 1, 2009. The same Section states that by May 1, 2010 the city shall implement "a pretreatment program in accordance with 40 CFR Part 403." Also in the permit under E. SPECIAL CONDITIONS, item 9, page 8 states that after the program is approved, the permittee shall implement and enforce its program. The permit is currently expired.
12. Union's and Wentzville's fact sheets state that a Pretreatment program is required, however, there are no Pretreatment implementation requirements in the permit.

From the table one can see that most cities with approved Pretreatment programs have implementation and reporting requirements in their NPDES permits. Four cities currently implementing Pretreatment programs do not have any implementation language at all in their NPDES permits: Jefferson City, Moberly, Union, and Wentzville. These cities should have the NPDES permits modified as soon as practicable to include implementation requirements. In

addition to these, there are three cities who have had Pretreatment programs approved in their current permit cycle, but have not yet had their permits reopened to insert implementation language. These are St. Peters, Farmington, and Sullivan.

Of the 46 active POTW Pretreatment programs, 29 have active NPDES permits, while 17 are expired. When the NPDES permit requires program implementation, reporting requirements also are required in the permit. Permit conditions regarding the requirement for reevaluation of local limits is not consistently included, as required at 40 CFR 122.44(j)(2)(ii) for approved pretreatment programs. Of the 46 active Pretreatment programs, only 15 have local limits reevaluation requirements, and 6 of these are in expired permits. Moreover, the citations in the MDNR permits for local limits reevaluation are to 40 CFR 122.21(j)(4), which does not appear to require local limits analysis. In addition, 40 CFR 122.44(j)(2)(ii) requires the reevaluation of local limits following the issuance or reissuance of the NPDES permit, while MDNR's statement requires the local limits evaluation be part of the permit application.

Industries Outside Program Cities

The PQR checklist contains a section for evaluating control mechanisms issued by the state to industries outside Pretreatment program cities. The MDNR, however, does not have permitting authority for indirect dischargers so is blocked from issuing permits to industries for which they are the Control Authority. They have fairly good success, however, getting their 26 CIUs outside Pretreatment cities to submit periodic compliance reports under 403.12(e). During the last Program Review, the EPA found that none of the industries were certifying their reports as required by at 40 CFR 403.12(l). This year's Program Review found that six of the seven industries evaluated are now using the certification statement. The only facility that was not was Bob Monnig Industries, a no-discharge hot dip galvanizing facility in Glasgow.

The MDNR does not track non-Categorical Significant Industrial Users outside Pretreatment program cities.

4. Stormwater

The NPDES program requires stormwater discharges from certain municipal separate storm sewer systems (MS4s), industrial activities, and construction sites to be permitted. Any state which is authorized to implement the NPDES program automatically assumes responsibility for the stormwater program. Missouri issues individual permits for medium and large MS4s, and a general permit for small MS4s, general land disturbance permits for stormwater related to construction activities, and a number of different general permits for stormwater related to industrial activities. Industrial facilities not covered by one of the general permits gets coverage under an individual permit. MDNR is fully implementing all aspects of the federally mandated stormwater program. Stormwater permits are written at the central office in Jefferson City and the central office has a comprehensive stormwater website set up to assist with the permitting needs of the regulated community.

Background:

The Missouri general stormwater permits, and individual MS4 permits at the time of the PQR were as follows:

- Individual Phase I MS4 Permits: Kansas City, Independence, Springfield
- Phase II General Permit
- St. Louis Area MS4 Co-permit
- General Permit to cover construction stormwater runoff
- Fourteen General SW permits that cover various industries

For Missouri, the EPA Region 7 selected four NPDES stormwater permits to review:

- Construction General Permit (MO-RA#####)
- Phase II General MS4 Permit (MO-R040000)
- Industrial General Permit for Clay Pits (MO-G84#####)
- Major Industrial Permit with Stormwater Requirements – SRG Global Inc. (MO-0001180)

General Permit for Stormwater Discharges from Construction Activity

The general permit which covers stormwater from construction sites over one acre is effective from February 8, 2012 to February 7, 2017. The permit was issued after the effective date for the new construction stormwater effluent guidelines and includes all the required elements of 40 CFR 450.21. The requirements tend to mirror the federal regulation language. The permit establishes a 25-foot natural vegetation buffer requirement around on-site waters. The biggest recent change to the construction stormwater program is that the state now has a new electronic NOI submittal system for obtaining coverage under this permit. NOIs are processed electronically by the central office, and approximately 1 FTE is required for construction stormwater permitting activities. The permit requires facilities to develop a site-specific Stormwater Pollution Prevention Plan (SWPPP), but does not require the permittee to submit the SWPPP unless the department requests it. The construction stormwater permitting program appears to be running well, and no inconsistencies with federal regulatory requirements were found during the review.

One recommendation for the next issuance of the Missouri Construction General Permit is to translate the construction stormwater effluent guidelines in ways that make them clear and enforceable; currently most have been incorporated verbatim from the C&D rule. Additionally, the EPA found that some effluent limits are contained within the requirements for development of a Stormwater Pollution Prevention Plan (SWPPP). For example, the 25-foot buffer requirement, the stabilization requirements, and pollution prevention requirements are also included within the SWPPP requirements. It is important that the permit have a clear distinction between the effluent limits in the permit, which the State is responsible for developing, and the discharger's SWPPP, which is a documentation tool used to demonstrate how the permittee plans to comply with the permit's effluent limits.

Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s)

Missouri currently has 162 Phase II MS4s including fourteen MS4s newly regulated due to the 2010 census. These newly regulated MS4s have been notified and have submitted applications for permit coverage, and will be covered once the general permit is reissued. The general permit for small Missouri MS4s expired 6-12-13. The state had been anticipating a new EPA stormwater rule affecting the post-closure requirements for MS4s, but after the many delays in proposing a rule, decided to finally go ahead with reissuance in the absence of such a rule. Reissuance has been held up by efforts to respond to stakeholder concerns. Overall, at this point, it appears that the new permit will be similar to the old permit; the permit contains the specific requirements for the six minimum measures required by 40 CFR 122.34, and will contain the same post-construction standard as the expired permit of reasonably mimicking the pre-development conditions at the site.

Missouri plans to use the final general MS4 permit as a template for reissuing the Phase I MS4 permits, which are all expired, in an attempt to bring the Phase I and Phase II requirements to parity. The state plans to reissue the permits in the following order: state-wide general permit, Springfield, Kansas City, and Independence. The state reports that 1.5 FTE are used in MS4 permitting efforts. In 2012 the state published the *Missouri Guide to Green Infrastructure: Integrating Water Quality into Municipal Stormwater Management*, to promote Green Infrastructure practices in regulated MS4s. Draft versions of the proposed general permit are consistent with federal regulatory requirements.

General Industrial Permit for Clay Pit Mining

As mentioned above, Missouri does not have one multi-sector general permit to cover stormwater from all the various industrial facilities needing coverage. Instead there are 14 different general industrial stormwater permits each covering a different industry. Facilities in industries not covered by these permits get coverage under individual permits. The state reports that 5 FTE are involved in industrial stormwater permitting activities. For this PQR the general permit for clay pits was chosen for review.

The general permit for clay pits is effective from November 13, 2009 to November 12, 2014 and covers stormwater and process wastewater discharges from clay mining and stockpiles (SIC codes 1455 and 1459). The following are some of the more significant requirements in the permit: The permit has numeric limits based for various parameters, some of which are technology-based, and some which are water quality-based. In addition to certain required Best Management Practices (BMPs), the permit requires facilities to develop site-specific SWPPPs to order to minimize the contaminants that might enter the stormwater. Most facilities are not required to submit their SWPPP to the Department unless notified by the Department that they must do so. Site inspections must be conducted at least monthly. Discharges are prohibited from causing violations of narrative water quality standards which are all explicitly included in the permit.

Major Industrial Stormwater Permit – SRG Global Inc.

Effective dates of the permit are from August 1, 2013 to December 31, 2015 (as part of its watershed permitting effort the state is issuing permits with less than a 5-year duration in order to get permittees in the same watershed on synchronized permitting schedules). The permit is currently on appeal and the conditions have been stayed pending resolution of the appeal. The facility engages in injection molding, electroplating, and surface coating of plastic automotive parts.

The permit lists three stormwater outfalls and contains numeric limits on these outfalls for pH, Chemical Oxygen Demand, and Total Suspended Solids. In addition to certain specified BMPs the permit requires the facility to develop a site-specific SWPPP with appropriate BMPs in order to minimize the contaminants that might enter the stormwater.

IV. REGIONAL TOPIC AREA FINDINGS

A. 316(a) – Thermal Discharge

MDNR has developed an mathematical approach for the complex task of developing permit limits based on the state’s heat criteria. The Determining Thermal/Temperature Limits Guidance document contains example calculations for both the Missouri and Mississippi Rivers since heat criteria are different for the two rivers. This document serves as an implementation guide and an SOP for permit writers.

Many facilities, primarily steam-electric plants, on the two large rivers will have difficulty meeting the heat criteria during warmer stream conditions. The temperature criteria for the Missouri River only contain a maximum summer temperature, while the criteria for the Mississippi River include monthly limits on maximum temperature. In warm years, river temperatures have approached or even exceeded the caps set in state criteria. As a result, the discharges of heat by the facilities exceed the temperature criteria. In these cases, facilities may consider pursuing the studies associated with a 316(a) variance.

The 316(a) variance process requires the facility requesting the variance to collect sufficient biological data to support a finding by the permitting authority that a “balanced and indigenous community” is protected in spite of the exceedance of the states’ numeric heat criteria. While 316(a) were granted in first round of NPDES permitting in the 1970’s, the renewal of those variances has received little attention. Changes in the facilities and the river over time have made most of the old studies out of date.

In 2013, the Office of Inspector General (OIG) released a report (Report No. 13-P-0264) (<http://www.theEPA.gov/oig/reports/2013/20130523-13-P-0264.pdf>) reviewing permits with thermal requirements. The OIG could not find any permits that had met the regulatory requirement for proper public notice when old 316(a) variances were renewed. The EPA urges a careful review of variance renewals and careful attention to the public notice requirements. See 40 CFR 124.57 for a description of the variance process and the public notice requirement.

MDNR has shown a firm commitment to proper calculations of permit limits, and this is a great first step. For some facilities, 316(a) variance studies will be required to justify the request for thermal variance. MDNR is including permit language that allows for 316(a) studies. The key to those studies is in setting up data collection methodologies that firmly support variance decisions. Both permittee and regulator benefit from regulatory certainty in final decisions.

B. 316(b) – Cooling Intake Structures

Like other states, MDNR has been waiting for the 316(b) existing facilities rule promulgation. Prior to release of the new rule, permit writers are required to use site specific BPJ to select the protection technologies for intake structures. It has been difficult for permit writers to push greater levels of protection, when those new controls might be contradicted or made obsolete by the pending rulemaking.

Difficult issues of 316(a) and 316(b) have created a “wait and see” approach where some permits for big river facilities are on the backlog. Hopefully the new 316(b) rules, recently released, will provide some certainty and permits can be reissued.

C. Whole Effluent Toxicity (WET)

WET testing serves as a means to assess toxicity from chemicals not covered by numeric criteria and provides a measure of the additive or interactive effects of mixtures of constituents in water. WET testing is the most important means of assessing compliance of the narrative criteria of “no toxics in toxic amounts”.

MDNR has shown great improvements in the WET program. MDNR is using multiple dilution tests yielding results in “toxic units” with fathead minnows and *Ceriodaphnia*. Multiple dilution tests give more information about the level of detected toxicity and allow statistical assessment of data sets.

The EPA updated the WET lab methods in 2002 and MDNR has updated permit language to incorporate the new methods.

Most importantly, MDNR has updated state standards to require testing and limits for chronic toxicity. The definition of chronic toxicity is based on the sub-lethal endpoint of the IC-25 affect and is expressed as a criteria of 1.0 TUc. This is an important completion of the WET program and provides an improved level of protection for the state’s streams. The need to include chronic WET testing and limits in permits had been a priority item listed in several past audits of the state program and had been an the EPA headquarters “action item” requiring follow-up. MDNR is working on implementation approaches for requiring testing and limits in permits.

An important change in the new standards is the approach to WET limits in permits. In the past, MDNR included acute limits in all major permits and in significant minor permits. The new water quality standard rules require MDNR to make a decision on reasonable potential and include WET monitoring or limits based on that finding. In facilities where monitored toxicity (acute or chronic) is below the calculated waste load allocation for Toxic Units, the old limit will be removed from the permit, but monitoring will still be required. This is a form of backsliding that should be addressed in the fact sheet.

MDNR’s permit language describing WET requirements has been updated and greatly improved. The EPA encourages continued review and honing of permit language to assure that requirements, whether monitoring or permit limits, are clear, concise, and enforceable.

D. Missouri Sludge Program

MDNR has not desired full authorization to run the sludge program, but has still been very active in maintaining sludge requirements in permits. When the Part 503 regulations were first promulgated, Missouri was one of the most active states in the nation in outreach and education of facility operators.

MDNR has provided several services to permittees which help keep up awareness of the Part 503 requirements and guide operators on the points of compliance.

The Missouri Extension Program has a number of links for short papers that explain basic compliance with the Part 503 rules and the science behind the requirements. These may have fallen out of use, but they are still helpful. The EPA would suggest links to these papers from the MDNR website.

Part III of the Standard Conditions in permits for POTWs contains a summary of the Part 503 rules and sets out compliance requirements in an orderly, easily understandable format. The standard conditions include several of the papers mentioned above (WQ 422-426) as requirements by citation. While the Part 503 rules are self-implementing, the rules are complex and MDNR's inclusion of the Part III Standard Conditions has been a great help in assisting permittees understand the points of compliance.

Part 503 has annual reporting requirements for larger facilities. The EPA did not create uniform reporting forms for the annual reporting due to the paperwork reduction act and the difficulties of getting forms through OMB. MDNR's "Form S" reporting forms are straightforward and guide the permittee in documenting compliance. By going through the forms (which fit well with the Part III Standard Conditions), the permittee is instructed in the proper testing and documentation needed for compliance. From the regulator's standpoint, these forms are easy to review.

E. Concentrated Animal Feeding Operations

The Federal Concentrated Animal Feeding Operations (CAFO) Rule revisions became effective December 20, 2008. Then in July 2012, in response to a court decision vacating portions of the 2008 CAFO rules, the rules were further amended to eliminate the requirement that an owner or operator of a CAFO that "proposes to discharge" must apply for a NPDES permit. MDNR revised its CAFO regulations to make them consistent with the 2008 federal rules on February 28, 2009 while the Missouri CAFO Nutrient Management Technical Standard became effective on March 4, 2009. At present, MDNR is revising its regulations in response to the 2012 revision to the federal regulations and proposes to remove the language relating to CAFO construction permitting requirements from its CAFO Design Guide (to 10 CSR 20-8.300) and from its CAFO operating regulations (10 CSR 20-6.300). The EPA submitted comments to MDNR on the proposed regulations in February 2014. Plans are for the proposed regulations to go on public notice in 2014.

The CAFO permit program is administered out of the Central Office in Jefferson City by a staff of 4 people. MDNR staff issue construction permits (for earthen basins only) and operating

permits, review nutrient management plans (NMPs) and applications, and are responsible for changes to regulations. During the last Missouri program review in 2010, the Agricultural Section had positions for 3 FTE engineers and 2 soil scientists dedicated to the CAFO permitting program. Since then, the CAFO permitting staff has become part of the Industrial Section and currently consists of 3 staff, none of whom work on CAFOs full time. MDNR has five field offices throughout the state. There is 1 inspector, (not 100% FTE) located in each of the 5 field offices, who is responsible for inspecting NPDES permitted CAFOs at least once per permit cycle. The inspector also is responsible for responding to complaints associated with livestock facilities.

In 2010, there were 550 NPDES permits for CAFOs. Of these operations, 525 were covered by MDNR's general NPDES permit for CAFOs. In response to court decisions holding that CAFOs that do not discharge are not obligated to have NPDES permits, there has been an exodus from NPDES permits to state no-discharge permits. Currently, MDNR has 21 operations covered under an individual NPDES Permit, and 29 operations covered under a NPDES General Permit (MOG010000) issued February 24, 2013. This is a 95% reduction in NPDES permit coverage. MDNR established the state no-discharge General Operating Permit (MOGS10000) on January 28, 2013. The state no-discharge general permit is most applicable to operations where production areas are under roof and covers 437 operations (mostly swine and poultry CAFOs). Since most of the state no-discharge permitted operations transfer all of their manure and process wastewater, MDNR developed a one-page sheet that covers 8 of the 9 minimum NMP requirements (protocols for land application is omitted). This one page state-NMP is for facilities that transfer all of their waste and is submitted with their notice of intent (NOI) to be covered under MOGS10000. Public notice of changes to the state-NMP are not required under the state no-discharge general permit because the no-discharge permits are not subject to federal public notice requirements.

Inspections at CAFOs operating without an NPDES permit need to effectively evaluate and clearly document whether the facility discharges and is subject to NPDES permitting requirements. (See SRF CWA Element 2 – Inspections). In order to conduct a parallel review with the enforcement side, facilities were picked from a 2013 inspection targeting list. However, since selection for review, three of the five CAFOs applied for and obtained a state no-discharge operating permit. The remaining 2 facilities reviewed have coverage under an individual NPDES permit. As a result, the EPA reviewed the permit applicable to each selected CAFO.

Results of file review:

Reviewed 3 Notice of Intent (NOI) for coverage under the State General No-Discharge permit:

- **MOGS10423 Ponderosa LLC**
- **MOGS10174 AR Curtis Inc.**
- **MOGS10428 Danny Bevell**

The State No-Discharge permit requires CAFOs to develop and implement a state-NMP that meets the requirements of 10 CSR 20-6.300(5) and the state Technical Standard upon the effective date of coverage of this permit. Both Ponderosa and AR Curtis failed to complete the

NMP section of the NOI, and MDNR's no-discharge assessment is based on the information in the NOI. This begs the question: is MDNR conducting sufficient assessments of whether these facilities are not discharging? Pursuant to the EPA's Compliance Monitoring Strategy, facilities claiming that they do not discharge should be inspected once to determine if they are designed, constructed, operated and maintained so that the facility does not discharge to a water of the US and re-inspected if new information becomes available that they do discharge. However, based on the NOI application procedure, the MDNR's limited resources, the file review and recent EPA enforcement actions in Missouri documentation was unavailable to demonstrate that MDNR is adequately ensuring that CAFOs applying for the no-discharge permit are truly no-discharge operations.

In response to an NMP question contained in the NOI, "do animals have access to waters of the state within the production area", both AR Curtis and Danny Bevill indicated yes. In both instances this would be a facility characteristic that would likely disqualify the CAFOs from coverage under the no-discharge permit. However, it was not documented that MDNR followed up with the operations to substantiate the no-discharge claim.

Reviewed 2 CAFO NPDES permits:

- **MO-0131032 DM Farms (Murphy Family Ventures, Ozark-Osage Pyramid)**
- **MO-0119962 Sharpe Land and Cattle Company**

DM Farms is a Class IV CAFO that was individually permitted in August 2011 for 50,912 swine > 55 lbs and 15,952 swine < 55 lbs. The production area includes 10 anaerobic lagoons each with a secondary containment structure to contain any spills. As required in 10 CSR 20-6.300(3)(H)(4), operations with a wet handling system that also use a flush system shall have a secondary containment structure(s) or earthen dam. The NMP addressed all of the 9 minimum requirements in a concise and complete manner.

Sharpe Land and Cattle Company is a Class IV CAFO that was individually permitted December 10, 2010 for a maximum of 1200 goats and 8,514 dairy cows. The current NMP was submitted on July 11, 2011, seven months after the permit was issued. The CAFO operation contains both domestic and livestock wastewater systems. The livestock production areas consist of multiple earthen basins, a solids composter, a feed storage area, and a composting area for solids and dead animals. Waste from the dairy milking parlor is removed using a freshwater flushing system and a mechanical solids separator. The solids separator has a secondary containment structure as required by 10 CSR 20-6.300(3)(H)(4). While the permit states that there shall be no release of process wastewater from secondary containment structures, the permit does allow stormwater to be released when in-field testing of ammonia-N is less than 2.5 mg/L. Stormwater that exceeds the 2.5 mg/L ammonia-N limit must be pumped back into the lagoon or properly land applied. The origin of testing "stormwater" for ammonia-N at 2.5 mg/L at CAFOs is not known. The permit states that any discharges to waters of the state, including those discharges allowed by this permit, shall not cause a violation of the state water quality standards. The chronic criteria for ammonia-N is 2.5 mg/L at certain pH's and temperatures, but not all.

The NMP consisted of 2 volumes; the contents of which were not all required by regulation. The permit requires a P-Index to be conducted on all application fields, but only indexes for fields

that were rated high or very high were included. Past monthly manure analyses and required soil tests were included in the NMP, although the lab method used to analyze the available soil test P could not be readily found.

Discussion of Issues of Concern

The EPA supports the requirement that calls for operations with a wet handling system that also use a flush system to have secondary containment structure(s). This requirement provides an additional safeguard, especially at operations that have moved from an NPDES to state no-discharge permit, against pollutant discharges that are violations of state and federal discharge prohibitions. However, it appears that MDNR allows the release of collected precipitation runoff when ammonia field tests indicate the collected runoff is process wastewater because of the presence of pollutants. The effluent limitations for NPDES permitted CAFOs, codified in 40 CFR Part 412, prohibit the discharge of manure, litter, and other process wastewaters, except for allowing discharges when rainfall causes an overflow from a facility designed, maintained, and operated to contain all manure, litter, and process wastewater (including stormwater) plus runoff from the 25-year, 24-hour rainfall event. Any stormwater that contains pollutants because it has come in contact with feed, manure, litter, etc. is process wastewater and subject to the Effluent Limitation Guidelines and cannot discharge except as authorized by an NPDES permit. Unpermitted CAFOs (including CAFOs with State No-Discharge permits) cannot discharge pollutants under any conditions. All uncontaminated stormwater originating outside of the production area footprint should be diverted to prevent contact with manure, litter, or process wastewater as specified in CFR 40 §122.42 (e)(iii). Any stormwater that comes in contact with these materials must be collected and disposed of in a manner that is consistent with the CWA.

Missouri's definition of process wastewater does not appear to be as broadly defined as the definition in the federal regulations. The federal definition includes water directly or indirectly used in the operation of the AFO. The EPA indicated this difference in the definitions in comments recently submitted in February 2014 to MDNR in response to MDNR's proposed regulation changes. It is the EPA's expectation that this issue, and other issues identified in the EPA's comments on the proposed regulations, will be addressed as part of MDNR's revisions of the CAFO regulations.

In 2011, MDNR compiled a wet weather management guide (PUB2422) to aid in a producer's decision making and planning so as to minimize/eliminate impacts to water quality. Currently, the guide is referenced in both the NPDES and state no-discharge permits (the individual permits were issued prior to the guide's formation). The EPA agrees that chronic precipitation events may cause retention structures to exceed capacity, and if the operation is properly designed, constructed, operated and maintained, an NPDES permit authorizes a discharge under certain circumstances, including chronic rain periods that exceed designed storage capacity. In describing precautions that can be taken during a chronic wet weather event, the guide references language from the 2011 NPDES CAFO General Permit. Suggested practices include applying effluent to frozen or saturated soils and land application to prevent collapse of a lagoon's berm. However, such authorizations are not applicable to CAFOs without NPDES permits; meaning these authorizations are not available to CAFOs with State No Discharge permits.

All pollutant discharges from a CAFO to waters of the US are prohibited unless pursuant to a NPDES permit. Facilities covered under the State No-Discharge permit are not allowed to discharge under any circumstances because they do not have an NPDES permit. The State No-Discharge permit states that if storage structures are in danger of discharging due to a chronic wet weather event, CAFO owners shall take reasonable steps to lower the liquid level in the structure through land application, or other suitable means (as outlined in the wet weather guidance), to minimize or eliminate water quality impacts. For land application areas, the permit specifies that there shall be no discharge of manure, litter, process wastewater, or mortality by-products to surface waters of the state except where the discharge consists entirely of agricultural stormwater. Federal regulations require implementation of nutrient management practices by CAFOs seeking the agricultural stormwater exemption for land application area discharges. Discharges of manure or process wastewater not applied at appropriate agronomic rates, are not agricultural stormwater and are thus violations of the CWA and subject to NPDES permitting. Moreover, a discharge from an unpermitted CAFO caused by application of effluent to frozen or saturated fields would not be considered consistent with nutrient management practices and would not be exempt under the agricultural stormwater exemption.

As recently as 2008-2011, hundreds of NPDES-permitted CAFOs in Missouri were authorized discharge because of chronic rain events. Many of these CAFOs are now operating under the state no-discharge permit and will risk discharges that violate the CWA if they operate as outlined in the wet weather guidance when chronic rains occur again.

Level 1

The MDNR definition of process wastewater must be as stringent as the federal regulation at 40 CFR 122.23(b)(7). The definition must include water directly and indirectly used in the operation of a CAFO.

All uncontaminated stormwater originating outside of the production area footprint should be diverted to prevent contact with manure, litter, or process wastewater as specified in CFR 40 §122.42 (e)(iii). Any process wastewater/stormwater that comes in contact with these materials as specified in 40 CFR 122.23(b)(7) must be collected and disposed of in a manner that is consistent with the CWA. Authorization of discharges of process wastewater must be pursuant to a NPDES permit and consistent with the Effluent Limitation Guidelines.

MDNR is not sufficiently reviewing NOIs to ensure CAFOs applying for the state no-discharge permit do not discharge to waters of the United States.

The Wet Weather Management guide (PUB2422) contains practices that minimize discharges from land application areas during wet weather events. This guide was created to assist NPDES-permitted CAFOs to protect their runoff control structures from failures resulting from chronic and/or catastrophic precipitation events by authorizing limited discharges. However, the state no-discharge general permit cites the guide and also states that there shall be no discharge of manure, litter, process wastewater, or mortality by-products to surface waters of the state...except where it is an agricultural stormwater discharge. Land application timing and rates are critical to ensuring application at agronomic rates. Application of pollutants to precipitation-saturated

fields cannot be considered appropriately timed for agronomic uptake. Discharges of manure or process wastewater not applied at appropriate agronomic rates, are not agricultural stormwater and are thus violations of the CWA and subject to NPDES permitting. Implementation of the Wet Weather Management guide at CAFOs without an NPDES will not negate CWA liability.

V. ACTION ITEMS

This section provides a summary of the main findings of the review and provides proposed action items to improve Missouri's NPDES permit programs. This list of proposed action items will serve as the basis for ongoing discussions between EPA Region 7 and Missouri as well as between EPA Region 7 and EPA HQ. These discussions should focus on eliminating program deficiencies to improve performance by enabling good quality, defensible permits issued in a timely fashion.

The proposed action items are divided into three categories to identify the priority that should be placed on each Item and facilitate discussions between Regions and states.

- **Critical Findings** (Category One) - Most Significant: Proposed action items will address a current deficiency or noncompliance with respect to a federal regulation.
- **Recommended Actions** (Category Two) - Recommended: Proposed action items will address a current deficiency with respect to EPA guidance or policy.
- **Suggested Practices** (Category Three) - Suggested: Proposed action items are listed as recommendations to increase the effectiveness of the state's or Region's NPDES permit program.

The critical findings and recommended actions proposed should be used to augment the existing list of "follow up actions" currently established as an indicator performance measure and tracked under EPA's Strategic Plan Water Quality Goals or may serve as a roadmap for modifications to the Region's program management.

A. Basic Facility Information and Permit Application

Category 1- Federal Rules require that permit applications for major POTWs include three priority pollutant scans (40 CFR 122.21(j)(4) and 40 CFR 122.21 appendix J), but MDNR is only requiring one scan from major POTWs.

B. Technology-based Effluent Limitations

No deficiencies were noted during the program review.

C. Water Quality-Based Effluent Limitations

Category 1 – When calculating Reasonable Potential, it appeared that the application data indicated that it was not being used in the analysis.

Category 1 – The factsheet states that limitations within the permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Law and

40 C.F.R. Part 122.44; however, several effluent parameter limitations have changed or been eliminated without an explanation as to how they conform to the backsliding provision.

D. Monitoring and Reporting

Category 2 – MDNR is making progress in permitting for Water Treatment Plants (WTP). The EPA urges a robust approach to setting BPJ-based technology limits, and in consideration of water quality-based limits. MDNR should assure that WTP are submitting complete applications with representative monitoring. Reissued permits, even those accompanied by orders, should have representative monitoring.

E. Standard and Special Conditions

No deficiencies were noted during the program review.

F. Administrative Process

No deficiencies were noted during the program review.

G. Documentation

No deficiencies were noted during the program review.

H. National Topic Areas

Proposed actions items for core topic areas are provided below.

1. Nutrients

Category 2 – The EPA views the adoption of numeric nutrient criteria as an important tool for effective water quality management of nutrient pollution. MDNR needs to continue development of numeric criteria for nutrients for the state's waters.

2. Pesticides

Category 3 – It is suggested that in the reissued permit the state addresses whether pesticide discharges to special waters (e.g., Outstanding Natural Resource Waters and impaired waters) are addressed differently than Waters of the State. The reissued permit should also address discharges to endangered and threatened species and critical habitats and discharges near drinking water intake structures.

3. Pretreatment

Category 1 – MDNR must ensure that permits for all cities currently implementing Pretreatment programs contain language that requires implementation in accordance with the requirements of 40 CFR Part 403. Jefferson City, Moberly, Union, Wentzville, St. Peters, Farmington, and Sullivan are missing implementation requirements.

Category 1 –MDNR must ensure that permits for POTWs with pretreatment programs include the requirement to reevaluate local limits in timely manner per 40 CFR 122.44(j)(2)(ii).

Category 2 – MDNR must review and improve the quality of data in ICIS.

Category 3 – MDNR should ensure that fact sheets for POTWs without pretreatment programs state that a pretreatment program is not required and describe any discharging industries.

Category 3 – MDNR should follow-up with CIUs outside of Pretreatment program to ensure they are complying with reporting requirements.

4. Stormwater

No deficiencies were noted during the program review

I. Regional Topic Area

Proposed action items for special focus areas are provided below.

1. & 2. 316 (a) Thermal Discharge and 316 (b) Cooling Intake Structure

MDNR has developed a strong approach for calculating heat limits, but will need to build capability for assessing 316(a) variances where those are requested. There are several facilities where variances will be needed, and as highlighted by the OIG report, this needs to be done correctly. Renewal of 316(a) variances must be justified by data as required by 125.70-73.

3. Whole Effluent Toxicity

The MDNR WET program has been significantly updated and improved by the addition of chronic wet testing and limits.

4. Sludge

MDNR has included useful explanation of Part 503 requirements in permits and in reporting forms: this has been a great help to the EPA and to permittees.

5. Concentrated Animal Feeding Operations

Category 1 - The MDNR definition of process wastewater must be as stringent as the federal regulation at 40 CFR 122.23(b)(7). The definition must include water directly and indirectly used in the operation of a CAFO.

Category 1 – All uncontaminated stormwater originating outside of the production area footprint should be diverted to prevent contact with manure, litter, or process wastewater as specified in CFR 40 §122.42 (e)(iii). Any process wastewater/stormwater that comes in contact with these materials as specified in 40 CFR 122.23(b)(7) must be collected and disposed of in a manner that is consistent with the CWA. Authorization of discharges of process wastewater must be pursuant to a NPDES permit and consistent with the Effluent Limitation Guidelines.

Category 1 – MDNR is not sufficiently reviewing NOIs to ensure CAFOs applying for the state no-discharge permit do not discharge to waters of the United States.

Category 1 – The Wet Weather Management guide (PUB2422) contains practices that minimize discharges from land application areas during wet weather events. Implementation of the Wet Weather Management guide at CAFOs without an NPDES will not negate CWA liability. It should either be removed from the state permit or revised based on the no-discharge requirement.

Category 3 – Notice of Intent (NOI) application forms appear to contain language or terms that create confusion or misunderstanding regarding conditions that require CAFO owners or operators to apply for NPDES permits.

State Review Framework

I. Background on the Clean Water Act State Review Framework

The State Review Framework (SRF) is designed to ensure that the EPA conducts nationally consistent oversight. It reviews the following local, state, and the EPA compliance and enforcement programs for the Clean Water Act National Pollutant Discharge Elimination System

Reviews cover:

- **Data** — completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** — meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** — identification of violations, determination of significant noncompliance (SNC) for the CWA
- **Enforcement** — timeliness and appropriateness, returning facilities to compliance
- **Penalties** — calculation including gravity and economic benefit components, assessment, and collection

The EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

The EPA builds consultation into the SRF to ensure that the EPA and the state understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. The EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FFY 2004. The third round of reviews began in FFY 2013 and will continue through FFY 2017.

II. SRF Review Process

Review period: FFY2013

Key dates:

- Kickoff letter sent to MDNR: December 19, 2013
- Kickoff meeting conducted: December 13, 2013 via conference calls
- On-site file review conducted: March 11-13, 2014
- Draft report sent to state: July 29, 2014
- Draft report response sent from MDNR to the EPA: September 19, 2014
- Report finalized: January 15, 2015

State and the EPA key contacts for review:

- The EPA Region 7 PQR Lead Reviewer: Sunny Wellesley
- The EPA Region 7 SRF Clean Water Act Lead Reviewer: Seth Draper
- The EPA Region 7 SRF Coordinator: Kevin Barthol
- MDNR Water Pollution Control Branch Lead Contact for the review: Paul Dickerson

III. SRF Findings

Findings represent the EPA's conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state's last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue's severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state should correct the issue without additional the EPA oversight. The EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and the EPA will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, the EPA will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric's SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- **Natl Avg:** The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- **State % or #:** The percentage, or if the metric is expressed as a whole number, the count.

CWA Element 1 — Data

Finding 1-1	Area for State Improvement																													
Summary	Missouri did not batch any inspection or enforcement data to ICIS-NPDES for FFY 2013 and does not consistently batch accurate DMR data.																													
Explanation	<p>FFY 2013 is the third consecutive year that MDNR did not batch any compliance monitoring, enforcement, or single event violation data from Missouri Clean Water Information System (MoCWIS), its state database, to ICIS-NPDES. MDNR consistently enters this data into MoCWIS, which was modeled after ICIS-NPDES to ensure that the state can accommodate all data elements required by the national program. MoCWIS has been unable to communicate properly with the EPA's exchange network in order to process data in the compliance monitoring and enforcement universes prior to storage in ICIS-NPDES. For similar reasons, the batch routines that MoCWIS uses for DMR data do not result in all DMR data being consistently and accurately captured in ICIS-NPDES. MDNR and the EPA agreed to language in the FFY 2013-14 Performance Partnership Grant (PPG) workplan for taking steps to resolving these challenges. Accordingly, MDNR began to commit resources in FFY 2013, and the EPA has provided technical assistance to MDNR.</p>																													
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>1b1 Permit limit rate for major facilities</td> <td>≥95%</td> <td></td> <td>179</td> <td>179</td> <td>100%</td> </tr> <tr> <td>1b2 DMR entry rate for major facilities</td> <td>≥95%</td> <td>96.10%</td> <td>5785</td> <td>6652</td> <td>87%</td> </tr> <tr> <td>2b Files reviewed where data are accurately reflected in the national data system</td> <td>100%</td> <td></td> <td>3</td> <td>55</td> <td>5.5%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	1b1 Permit limit rate for major facilities	≥95%		179	179	100%	1b2 DMR entry rate for major facilities	≥95%	96.10%	5785	6652	87%	2b Files reviewed where data are accurately reflected in the national data system	100%		3	55	5.5%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																									
1b1 Permit limit rate for major facilities	≥95%		179	179	100%																									
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2b Files reviewed where data are accurately reflected in the national data system	100%		3	55	5.5%																									
State response	<p>The Department's Water Protection Program is currently working on two major enhancements, which are Batch 1 and Batch 2 & 3. The Department has determined that many of the permit data rejections from the EPA's ICIS-NPDES database are associated with DMRs from permits that have been modified in the Department's MoCWIS database. The Batch 1 enhancement will change how Missouri submits permit modifications to ICIS, and resolve many of the data rejections. Discovering the root cause of these rejections, and a solution, took a considerable amount of time. Completion of this enhancement is currently under discussion with OECA. The Batch 2 & 3 project will address submitting compliance monitoring and enforcement data to ICIS. The Department has an active contract with a third-party software provider to accomplish this task. The Department had anticipated completion of this task in FFY 2014, but delays with the third-party provider and</p>																													

	<p>Department resource constraints has delayed completion of the project. It is anticipated that this project will be completed during FFY 2015.</p>
Recommendation	<p>In accordance with Missouri’s PPG workplan for FFY 2013-14, MDNR should continue to identify necessary data flows from MoCWIS to ICIS-NPDES to enable complete and accurate batching of DMR, compliance monitoring, and enforcement data. The EPA will continue to provide MDNR technical assistance from Headquarters and Region 7 staff.</p> <ol style="list-style-type: none">1. MDNR should submit to the EPA a timeline of actions that will occur to correct the batch upload issues. Submit the timeline to the EPA with the first quarterly update (January 15, April 15, July 15, and October 15).2. Report to the EPA at each quarter (January 15, April 15, July 15, October 15) the progress made to correct the MoCWIS issues.3. MDNR should begin to batch all of these elements to ICIS-NPDES by September 30, 2015 to ensure that data will be complete and accurate, pursuant to the 1985 PCS Policy Statement and its appendices for ICIS-NPDES. <p>When the data is complete, accurate, and being consistently uploaded to ICIS-NPDES, the EPA will close this recommendation.</p>

CWA Element 2 — Inspections

Finding 2-1	Meets or Exceeds Expectations																																																																												
Summary	MDNR completed its inspection targets for NPDES program areas in FFY 2013, with one exception, Major CSO inspections.																																																																												
Explanation	<p>As summarized in the metrics table below, the number of inspections and audits that MDNR conducted in FFY 2013 meets or exceeds the number negotiated in the Compliance Monitoring Strategy (CMS) for all NPDES program areas except Major CSO inspections.</p> <p>MDNR has five major CSO facilities. The state typically inspects two Major CSOs in an inspection season. The state typically inspects all five Major CSOs every three years.</p> <p>It appears that MDNR does not have any issue meeting their inspection commitments. The EPA recommends that the state review its commitments, completed inspections, and problem areas to determine if there are sectors where the state resources could be focused.</p>																																																																												
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State response	The Department completed inspection targets for NPDES program areas in FFY2013, with one exception, Major Combined Sewer Overflow inspections. But the Department is still on target to complete these inspection commitments in the long-term because we only have 5 to inspect, and schedule to inspect them on a five-year basis. MDNR is																																																																												

	continually looking at opportunities to focus limited resources and still meet inspection targets.
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Recommendation

CWA Element 2 — Inspections

Finding 2-2	Area for State Improvement
Summary	MDNR inspection reports did not consistently identify pertinent facility information, compliance issues, and compliance determinations.
Explanation	<p>Compliance determination could be found and followed in 63 of the 69 inspection reports. Overall, the MDNR inspection reports had sufficient information to determine the facility’s compliance.</p> <p>Although minor in nature, the inspection reports had errors such as incorrect permit number, facility address missing, facility not fully described such as number of outfalls present, and missing inspection date.</p> <p>While inspection reports consistently allowed the EPA reviewers to determine compliance issues found by MDNR inspectors; the EPA found that the inspection reports could benefit from increased information. For example, the Core NPDES inspection reports did not define the facility layout, process train, and/or number of outfalls present at the facility. The Land Disturbance Permitted Sites reports did not consistently define which stormwater BMPs were present.</p> <p>As CAFOs in Missouri move from NPDES permits to state no discharge permits, CAFO inspection become the primary mechanism for assuring these operations comply with the CWA. To insure MDNR maintains the minimum requirements for an NPDES program, inspection at unpermitted CAFOs must clearly document whether the facility is discharging manure, litter or process wastewater</p> <p>The EPA reviewers also suggest that the addition of aerial facility layouts with descriptions of notable features would be beneficial for those reviewing the inspection reports. <i>This seems to be a regression of practices that at one time were part of MDNR’s processes.</i> In March 2012, MDNR reported to the EPA the following information: “On 3/23/2012, MDNR verified that all regional office are on board with the expectation to complete a CAFO inspection checklist for each CAFO inspection and also to include an aerial photograph for both CAFO and WWTP inspections. Satisfaction of these CAFO inspection items completes the actions still needing to be addressed under this recommendation. All other items were verified by the EPA to be incorporated consistently, as revealed by a review of several WWTP and CAFO inspection reports from late 2011.”</p>

Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
		6a Inspection reports complete and sufficient to determine compliance at the facility	100%		63	69
State response	<p>During review of the EPA's comments, the Department noticed that inspection staff occasionally coded compliance monitoring activities incorrectly in MoCWIS; this affected the sample that the EPA reviewed. For instance, several of the CAFO reports were documenting spill investigations rather than scheduled compliance inspections. This could explain some of the "missing" elements documented during the review. Department staff use a CAFO inspection checklist when conducting compliance inspections, and includes the checklist with the inspection report. When conducting response to water pollution emergencies (e.g., a spill), staff do not use or attach a CAFO inspection checklist. Some of the inspection reports reviewed by the EPA were associated with spills; therefore, the report did not include a checklist. Department staff use an automated reporting system to generate reports. The Department currently has an internal workgroup updating and standardizing the templates used by this system for all media (i.e., Water Pollution, Drinking Water, Air, Hazardous Waste, Solid Waste, etc.) Staff will ensure that the templates include these required items. The Department will provide staff with a memorandum reminding staff to include all required information in each inspection report and enter inspection data into MoCWIS properly. These items are expected to be completed by March 2015. In addition, the Department will provide the EPA with a copy of the inspection memorandum noted above following its completion in March 2015.</p>					
Recommendation	<p>The EPA recommends MDNR revise their inspection report drafting process so that basic information regarding the facility is captured. For inspections at CAFOs operating without an NPDES permit, the EPA recommends that inspections effectively evaluate and clearly document whether the facility discharges and is subject to NPDES permitting regulations.</p> <ol style="list-style-type: none"> 1. Submit to the EPA the memorandum to staff identified in the state response above by April 15, 2015. 2. Submit to the EPA the revised inspection report templates (identified in the State Response above) which will be used by the Water Pollution branch. <p>When the EPA is satisfied that the inspection report completeness issues are resolved, the EPA will close this recommendation.</p>					

CWA Element 2 — Inspections

Finding 2-3	Area for State Improvement
Summary	MDNR files did not contain any information on how inspection checklist or field notes were retained.
Explanation	<p>The EPA found that the majority of the inspection reports were narrative in nature. The checklists used to create the narrative reports were not in the official file. The inspection checklist and field notes are an essential part of the evaluation of the facility. It is unclear to the EPA whether the field inspection checklist and/or field notes were retained by the inspector. The EPA’s Compliance Manual notes: “The field notebook should never leave the inspector’s possession during the inspection. Do not allow a facility to copy the field notebook. Notebooks become an important part of the evidence package and are admissible in court. The field notebook is a part of government records and is not to be considered the inspector’s personal record. Hold notebooks indefinitely pending disposition instructions. There have been instances, although not frequent, where an inspector needed to look back at their field notes some 10 to 20 years later for related enforcement work.” The Manual continues: “An inspector may need to testify in an enforcement proceeding. Therefore, it is imperative that each inspector keep detailed records of inspections, investigations, samples collected, and related inspection functions. Types of information that should be entered into the field notebook include the following”</p> <p>The EPA reviewed the MDNR Operations Manual to determine whether the agency has a specified record retention procedure. The manual includes information on what files to request from the facility but does not state how the material will be maintained once it is gathered.</p>
Relevant metrics	This generally falls under metric 6a
State response	<p>The Department responds that field notes and checklists are generated during inspections and used to prepare the final inspection report. Once the inspection report is finalized, the field notes and checklists are destroyed. The checklists mimic the electronic database checklist, which is used to generate automated reports; therefore, once the data has been transferred from the checklist to the electronic database, there is no need to retain a paper copy of the checklist. Likewise, pertinent information contained in the inspection field notes is wholly incorporated in the final inspection report, which is retained in the Department’s file for the facility; therefore, there is no need to retain paper copies of field notes. The Department will update the Operations Manual, by March 2015, to describe how field notes and checklists shall be managed. The</p>

	Department will notify the EPA following completion of revisions to the Operations Manual, which is expected to occur by March 2015.
Recommendation	<p>MDNR should revise their operations manual to include details which clearly define how field notes are managed.</p> <ol style="list-style-type: none">1. MDNR should submit the revised Operations Manual to the EPA on April 15, 2015. <p>Once the field note guidance has been addressed by MDNR and reviewed by the EPA, the item can be closed.</p>

CWA Element 2 — Inspections

Finding 2-4	Area for State Improvement																	
Summary	Inspection reports reviewed were not issued within 30 days.																	
Explanation	<p>The EPA reviewed a total of 69 inspection reports. For FFY13 52% of the MDNR reports were completed within 30 days. The EPA reviewed 53 inspection reports conducted in FFY13, 10 conducted in FFY12, five in FFY11, and one in FFY09. The 53 FFY13 inspection reports were completed on average in 44 days.</p> <p>The MDNR Operations Manual states: <u>“The report must be written and transmitted to the facility within 30 days -- the sooner the better since information is easier to recall and organize soon after the inspection.</u> The primary objective of the inspection report is to organize all of the information obtained during the inspection process into a clear and comprehensive report package. General information on inspection report writing is contained in Appendix A. Consult program-specific guidance, where available, for automated inspection report forms that can greatly reduce the time needed to complete the report.”</p> <p>However, the MDNR Operations Manual states regarding Land Disturbance Sites: “Completing the Written Report <u>Due to the nature of construction, the conditions at a land disturbance sites change rapidly.</u> Equally as important is to realize that the lack of proper best management practices can cause damage to the environment at the next rain event. This requires that our inspection activities progress at a more rapid pace. <u>Written reports for land disturbance sites must be completed and transmitted to the permittee within 10 business days of the date of the investigation or inspection.</u> Any enforcement response should follow the guidance of the Inspection and Enforcement Manual.”</p> <p>MDNR completed four out of ten land disturbance inspections within ten days. This was noted to be an issue in the FFY09 MDNR SRF.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>6b Inspection reports completed within prescribed timeframe</td> <td>100%</td> <td></td> <td>32</td> <td>69</td> <td>46.4%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	6b Inspection reports completed within prescribed timeframe	100%		32	69	46.4%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
6b Inspection reports completed within prescribed timeframe	100%		32	69	46.4%													
State response	The Department will update the Operations Manual to provide an SOP for timelines for issuing inspection reports based on: 1) the type of inspection, 2) the severity of violations documented during the inspection and 3) the availability of sample results. The Department will strive to issue <u>all</u>																	

	<p>inspection reports within thirty days from the date of inspection. If sample results are not received within this timeframe, the results can be sent under a separate cover letter upon availability. The Department will develop a report generated from MoCWIS, by March 2015, to ensure inspection reports are issued in a timely manner. This report can be used to provide the EPA with quarterly updates until such time that the ICIS Batch 2 & 3 projects are complete.</p>
Recommendation	<ol style="list-style-type: none">1. MDNR should develop a Standard Operating Procedure which will implement the timeline goals specified in the Operations Manual by April 15, 2015.2. MDNR should report to the EPA on a quarterly basis (January 15, April 15, July 15, and October 15) the percentage of inspection reports that have been issued within 30 days. <p>Once the timeliness issue has been addressed by MDNR and approved by the EPA, the item can be closed.</p>

CWA Element 3 — Violations

Finding 3-1	Area for State Improvement																																																					
Summary	Files reviewed showed MDNR does not consistently or accurately identify single-event violation(s) as SNC or non-SNC.																																																					
Explanation	<p>The review of the violations found in the MDNR inspection reports identified that MDNR had an issue identifying SNC. The facilities where inconsistent SNC determinations were found: Sedalia North WWTF discharge which lead to a fish kill, Little City MHP had no evaluation of SNC, Kari’s Cupboard and Camp had no evaluation of SNC, Columbia Pretreatment Audit did not specifically identify if issues were SNC, Poplar Bluff did not receive an SNC evaluation for enforcing unapproved local limits.</p> <p>Also, as explained in Element 1-1, MoCWIS is currently being upgraded. This upgrade will allow MDNR to use SEV codes when compliance issues are identified.</p>																																																					
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7a1 Number of major facilities with single event violations</td> <td></td> <td></td> <td>0</td> <td>178</td> <td>0%</td> </tr> <tr> <td>7d1 Major facilities in noncompliance</td> <td>N/A</td> <td>64.1%</td> <td>171</td> <td>179</td> <td>95.5%</td> </tr> <tr> <td>7f1 Non-major facilities in Category 1 noncompliance</td> <td></td> <td></td> <td>78</td> <td>179</td> <td>44%</td> </tr> <tr> <td>7g1 Non-major facilities in Category 2 noncompliance</td> <td></td> <td></td> <td>1473</td> <td>2840</td> <td>51%</td> </tr> <tr> <td>8a2 Percentage of major facilities in SNC</td> <td>N/A</td> <td>26.2%</td> <td>166</td> <td>179</td> <td>92%</td> </tr> <tr> <td>8b1 Single-event violations accurately identified as SNC or non-SNC</td> <td>100%</td> <td></td> <td>3</td> <td>8</td> <td>38%</td> </tr> <tr> <td>8c Percentage of SEVs identified as SNC reported timely at major facilities</td> <td>100%</td> <td></td> <td>1</td> <td>8</td> <td>13%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7a1 Number of major facilities with single event violations			0	178	0%	7d1 Major facilities in noncompliance	N/A	64.1%	171	179	95.5%	7f1 Non-major facilities in Category 1 noncompliance			78	179	44%	7g1 Non-major facilities in Category 2 noncompliance			1473	2840	51%	8a2 Percentage of major facilities in SNC	N/A	26.2%	166	179	92%	8b1 Single-event violations accurately identified as SNC or non-SNC	100%		3	8	38%	8c Percentage of SEVs identified as SNC reported timely at major facilities	100%		1	8	13%
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<p>State response</p>	<p>Department inspectors are instructed to evaluate violations using guidance provided in the Compliance Manual to determine whether or not to issue a Letter or Warning (LOW) or Notice of Violation (NOV) to a facility. The follow-up response, or compliance monitoring action (i.e., issuing an LOW or NOV), is largely dependent upon the severity of the violation and/or the acute or chronic nature of the violation. Violations determined to be SNC are issued an NOV unless the permittee has previously been informed of the violation and is taking reasonable action to resolve the violation. The Department will update the Compliance Manual and Operations Manual to require inspectors to specifically label SNC violations as SNC in inspection reports. These manual updates are expected to be completed by March 2015. The Department has a current data enhancement project to add a flag in the MoCWIS database to identify single event violations. This flag will be transmitted as a single event violation code to ICIS as part of the data batch projects discussed in the state's response to Finding 1-1. This enhancement is expected to be completed during FFY 2015. Additionally, Department staff can currently generate a report from MoCWIS to identify facilities that have been issued LOWs and NOVs; therefore, staff can identify facilities that are out of compliance using data already managed by MoCWIS. Once the MoCWIS enhancement discussed immediately above is complete, staff will have the capability to generate a report from MoCWIS that identifies all facilities having violations with single event violation flags. The Department will notify the EPA following completion of the manual updates discussed above and single event violation enhancement in MoCWIS is complete.</p>
<p>Recommendation</p>	<p>MDNR staff should include a statement in the inspection reports, data system, and official file identifying that the violations being assessed are significant noncompliance of the state's regulations. These SNC determinations should be entered into MoCWIS so that MDNR personnel can identify facilities which are out of compliance with environmental regulations. The SNC determinations should include SEV codes being entered into MoCWIS/ICIS.</p> <ol style="list-style-type: none"> 1. Submit to the EPA by April 15, 2015, the updated operations and compliance manuals which will result in SNC determinations being made by inspectors. 2. MDNR should report to the EPA on a quarterly basis (January 15, April 15, July 15, and October 15) the steps taken to complete SNC determinations. <p>The EPA will consider this item closed once the plan of action is implemented.</p>

CWA Element 3 — Violations

Finding 3-2	Area for State Improvement												
Summary	MDNR pretreatment compliance inspection reports did not consistently identify and determine the compliance of the inspected facility.												
Explanation	<p>The compliance determinations often identified specific permit issues. Seven inspection reports did not make an official MDNR determination about the facility’s compliance with their permit or regulations. These inspection reports most often were Pretreatment inspections.</p> <p>The SRF reviewed eight pretreatment compliance inspections and eight CIU inspections performed by MDNR. Six of the eight MDNR pretreatment inspection reports contained information that was contradictory in nature and/or found compliance issues yet did not completely evaluate for compliance with the issued permit.</p> <p>Contradictory information in the inspection report: Poplar Bluff (IU SNC identification confusion), Joplin (IU not identified as SNC), St. Joseph (BOD/TSS limit confusion, IUs in SNC yet not reported).</p> <p>Compliance information not fully evaluated: Columbia (potentially utilizing unapproved Local Limits, problems with SNC identification), Poplar Bluff (potentially utilizing unapproved Local Limits), Cape Girardeau (potentially operating under an unapproved Sewer Use Ordinance), Lebanon (potentially utilizing unapproved Local Limits, Copper NPDES permit violations), and Joplin (potentially operating under an unapproved SUO) Maryville (IUs in SNC yet no record of response).</p>												
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>7e Inspection reports reviewed that led to an accurate compliance determination</td> <td>100%</td> <td></td> <td>62</td> <td>69</td> <td>90%</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	7e Inspection reports reviewed that led to an accurate compliance determination	100%		62	69	90%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #								
7e Inspection reports reviewed that led to an accurate compliance determination	100%		62	69	90%								
State response	<p>The Department held a training session on pretreatment regulations and inspections, including a discussion on determining SNC, during the 2014 Clean Water Regional Office/Central Office Coordination meeting on August 19-21, 2014. Department staff are currently drafting language for the Operations Manual that will provide guidance to inspectors on conducting and writing inspection reports for pretreatment inspections. This guidance is expected to be completed by March 2015. Department staff would be interested in participating in joint inspections with the EPA. The Department will notify the EPA following finalization of this guidance document.</p>												

	<p>Additionally, the Department would be interested in hosting a training event if the EPA would be interested in providing pretreatment training. The Department is agreeable to discussing a capacity building schedule with the EPA, and this could be developed for FY 2016 since the FY 2015 inspections have already been scheduled.</p>
Recommendation	<p>MDNR staff appear to need additional experience and/or training in Pretreatment Regulations as applied by Approved Pretreatment Programs. MDNR inspector's knowledge of pretreatment regulations such as trainings, presentations, participating in Joint inspections with the EPA, or any other methods to assist inspectors completing these types of inspections. The MDNR and the EPA will work to create a capacity building schedule to create achievement milestones, such as, training accomplished in 3 months, 10 joint inspections in FFY16, etc., for the removal of this item.</p> <ol style="list-style-type: none">1. Submit to the EPA by April 15, 2015, the updated operations and compliance manuals which will include guidance to inspectors performing pretreatment compliance inspections.2. MDNR should report to the EPA on a quarterly basis (January 15, April 15, July 15, and October 15) the steps taken to increase Pretreatment expertise, knowledge, or otherwise build capacity within MDNR. <p>Once the EPA is satisfied that state actions have addressed this deficiency, the EPA will mark this recommendation complete.</p>

CWA Element 4 — Enforcement

Finding 4-1	Area for State Improvement						
Summary	MDNR’s informal and formal enforcement actions do not always bring a facility back into compliance.						
Explanation	<p>The EPA reviewed 63 enforcement actions issued by MDNR in the FFY13 SRF. The majority of these actions resulted in the facility coming back into compliance. 17 of the 63 actions did not result in the facility coming back into compliance. Five of the 17 were followed with an additional, often escalated enforcement action, which resulted in the facility coming into compliance, such as Emery Creek, Drexel South, Paris Ready Mix, Larry Long, and Twin Hills Farms. The remaining 12 actions which did not result in a return to compliance or an escalated enforcement response were primarily sent to one facility, Great Western Hotel. This facility received at least ten actions during FFY13. These actions resulted in no change to the facility’s compliance with its issued wastewater permit. Additionally, MDNR did not respond to Majors in noncompliance in a timely manner.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	9a Percentage of enforcement responses that return or will return source in violation to compliance		100%		46	63	73%
	10b Enforcement responses reviewed that address violations in an appropriate manner		100%		60	63	95%
	10a1 Major facilities with timely action as appropriate		98%		2	171	1.2%
State response	<p>The Department's escalation policy is provided in the Compliance Manual, and staff are familiar with this guidance. On Great Western Hotel, the enforcement actions taken were LOWs for failure to submit complete, accurate or timely DMRs. Following several unsuccessful attempts through conference, conciliation and persuasion (i.e., CC&P, which is required by state statute), the matter was referred to the Water Protection Program's Compliance and Enforcement Section in March 2013. Following unsuccessful attempts to resolve violations at the enforcement level, the matter was referred to the Attorney General's Office in June 2014.) The Department feels that the escalation policy outlined in the Compliance Manual is appropriate. The Compliance Manual provides guidance on when to issue LOWs and NOVs, and when to refer the matter to the Compliance and Enforcement Section or the Attorney General's Office. The Compliance Manual also allows for some discretion regarding escalating enforcement due to case-specific.</p>						

	<p>circumstances, e.g., if the facility has already initiated corrective actions that will resolve violations in a reasonable timeframe. In general, though, the escalation policy is as follows:</p> <ol style="list-style-type: none"> 1. First violation -LOW. 2. Second occurrence of violation -NOV. 3. Third occurrence of violation, or unsuccessful attempts to resolve the violations through CC&P within 90-180 days -Enforcement Action Request. 4. Unsuccessful attempts to resolve the violations through an out-of court agreement -Referral to the Attorney General's Office. <p>The Department will draft a memorandum to regional office staff to remind them of the escalation policy outlined in the Compliance Manual.</p>
Recommendation	<p>MDNR should escalate its enforcement response if a facility is not coming into compliance.</p> <ol style="list-style-type: none"> 1. The MDNR should submit memorandum to the regional office staff (identified in the above State Response) to the EPA by April 15, 2015. <p>Once the escalation memorandum has been submitted to the EPA and reviewed, this can consider the item closed.</p>

CWA Element 4 — Enforcement

Finding 4-2	Area for State Improvement
Summary	The Missouri Attorney General’s Office (AGO) appears to slow the process of concluding environmental cases.
Explanation	<p>The EPA reviewed four formal enforcement files which were referred to the AGO; Emery Creek Ranch, Little City MHP, Gravois Bluffs Estates, and Kari’s Cupboard. Two of the facilities, Little City MHP and Gravois Bluffs Estates, had information in the facility file which indicated the enforcement action was complete. The remaining files do not contain any information that indicate that the enforcement action is progressing, stalled, or settled.</p> <p>The enforcement case information and timeline: Emery Creek – MDNR referred case to the AGO in September 2012. September 2013 AG files for Injunctive Relief and Civil Penalties. No further information noted after the September 2013 AGO filing. Little City MHP – MDNR referred to AGO on 11/08/2010. AGO settled case on September 9, 2013. The case was concluded 1,036 days after the MDNR referral to the AGO. Kari’s Cupboard – AGO referral in February 2013. No further information in file as of July 2013. Gravois Bluffs – MDNR referred the case to the AGO on February 23, 2011. AGO settled the case on November 30, 2012. The case was concluded 646 days after the MDNR referral to the AGO.</p> <p>These enforcement actions appear to be significantly delayed in conclusion of the cases.</p>
Relevant metrics	This metric generally fits into 10a
State response	Cases in litigation do not lend themselves to quick resolution (i.e., less than a year or two from referral to execution of a legal resolution). AGO has experienced an increase in case load as well as a reduction in staff over recent years, which has affected resolution timeframes, but the AGO feels that the amount of time spent negotiating settlement and litigating matters has been appropriate. The Department will request that the AGO develop a work plan that outlines timeframes for milestones and resolution goals for referred cases.

Recommendation

1. The MDNR and AGO should submit a work plan that includes information on the enforcement timeline and steps taken to address delays by April 15, 2015.
2. MDNR should submit a quarterly report (January 15, April 15, July 15, and October 15) to the EPA discussing the actions it is taking to address the timeliness issues at the AGO.

Once the EPA is satisfied that state actions have addressed this deficiency, the EPA will mark this recommendation complete.

CWA Element 5 — Penalties

Finding 5-1	Area for State Improvement																	
Summary	MDNR initial penalty calculations include gravity, however, economic benefit is not considered by the state. <i>This is a repeat finding from the EPA SRF review from FFY09.</i>																	
Explanation	<p>Three (Brandco Investments, LLC, Little City MHP, and Kari’s Cupboard) of the 13 penalties reviewed considered economic benefit within the penalty calculation. The MDNR Civil Penalties manual states: “Civil penalties are an indispensable part of enforcement. Penalties serve several purposes, including minimizing the effect of violations on human health and the environment, achieving a swift return to compliance, <u>removing any economic advantage that might have come about through violations</u>, and deterring others from similar acts.” Additionally, the MDNR Civil Penalties manual further states: “Each of the environmental protection statutes contain provisions related to penalties, generally indicating the violations subject to penalties and the range of penalties that may be assessed. Some statutes identify factors to be considered in developing a proposed penalty. These typically include the seriousness and duration of the violation, the degree of responsibility of the violator, actions taken by the violator to mitigate the effects of the violation, any past history of violations, <u>any economic benefit obtained through the violation</u>, and the ability to pay.” If the recommended penalty excludes an economic benefit component, MDNR’s penalty worksheet must provide a rationale for its exclusion.</p>																	
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>11a Penalty calculations reviewed that consider and include gravity and economic benefit</td> <td>100%</td> <td></td> <td>3</td> <td>13</td> <td>23%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%		3	13	23%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #													
11a Penalty calculations reviewed that consider and include gravity and economic benefit	100%		3	13	23%													
State response	<p>The Department has amended and implemented the penalty matrix worksheet to expand the discussion on and consideration of economic benefit. The revisions are based upon 10 CSR 20 3.010(3)(D). Economic benefit including delayed and avoided costs added to the penalty. Determination made by the Department using an economic benefit formula that provides reasonable estimate of the economic benefit. Economic benefit may be excluded if one of the following occurs:</p> <ol style="list-style-type: none"> 1. Economic benefit is insignificant; 2. Compelling public concerns that would not be served by taking the case through administrative appeal or circuit court litigation; or 																	

	<p>3. Unlikely Department would be able to recover economic benefit based in litigation based on the particular case.</p> <p>Note: The Department completed this task prior to finalization of the SRF response.</p>
<p>Recommendation</p>	<p>In FFY15, the EPA will review the amended penalty matrix worksheets to determine the economic benefit is being considered by MDNR.</p> <ol style="list-style-type: none"> 1. MDNR should submit their completed amended penalty matrix sheets to the EPA by April 15, 2015. 2. The MDNR should submit a penalty which includes an economic benefit evaluation and a penalty where economic benefit has been excluded to the EPA by April 15, 2015. <p>Once the EPA is satisfied that state actions have addressed this deficiency, the EPA will mark this recommendation complete.</p>

CWA Element 5 — Penalties

Finding 5-2	Area for State Improvement					
Summary	MDNR’s documentation for penalty actions do not document the difference between proposed and final assessed penalties.					
Explanation	The EPA reviewed a total of 13 penalty actions. Two of the 13 penalty actions were issued without changes to the penalty and thus were not considered in this metric. Four of the 11 penalty actions were issued by MDNR with a different penalty amount than the calculated amount in the file. These were Aurora Grand Meat Co., Sedalia North WWTF, Drexel South WWTF, and M-D Building Products. MDNR should ensure that the official file contains a justification for the difference between the calculated penalty amount and the issued penalty.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	12a Documentation of the difference between initial and final penalty and rationale	100%		7	11	63%
State response	The Department does not routinely issue penalties through unilateral orders; rather, the Department calculates a civil penalty based on the violations documented and negotiates the penalty amount paid. The negotiated penalty amount is included in a negotiated agreement. Department enforcement files contain correspondence between the Department and the responsible party documenting any reduction in the penalty calculated. The Department developed and implemented a new process for enforcement staff to document reductions in penalty amounts through negotiations. Negotiation discussions between the case manager, unit chief and section chief are documented in a memorandum-to-file each time a penalty offer deviates from the originally calculated and approved penalty. The Department initiated the reporting protocol prior to finalization of the SRF response.					
Recommendation	MDNR should submit an example penalty memorandum-to-file that documents the penalty deviation as identified in the State Response to the EPA by April 15, 2015. Once the files are consistently being amended, the item can be closed.					

CWA Element 5 — Penalties

Finding 5-3	Meets or Exceeds Expectations					
Summary	The MDNR documentation consistently documented the penalty payment information.					
Explanation	The EPA reviewed a total of 13 penalty actions. Nine of the 13 penalty actions required that penalty payments be submitted in FFY13. The only file reviewed that did not contain penalty payment information was Brandco Investments, LLC.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	12b Penalties collected	100%		8	9	88%
State response						
Recommendation						

Appendix A: SRF File Selection

Files are selected according to a standard protocol using a web-based file selection tool combined with other protocols when state data is not available in the EPA's national database. These protocols are designed to provide consistency and transparency to the process.

File Selection Process

The EPA Region 7 followed the File Selection Protocol to select 68 files for the on-site State Review Framework (SRF) enforcement review. This list includes 66 facility files that were chosen to be representative of Missouri's NPDES compliance monitoring and enforcement activity in federal fiscal year 2013 and/or to overlap with the permitting program's selections for the Permit Quality Review. The remaining 2 of 68 files were chosen as supplemental files to help the EPA Region 7 better understand whether any potential areas of concern identified via the Data Metrics Analysis are substantiated. All 68 files and their rationale for selection are listed below.

The 66 representative files were chosen to provide a cross-section of permit types and, within each permit type, to represent facilities that were subject to an inspection or an enforcement action. Altogether, 40 files were selected as representative inspections or audits and 26 as representative formal or informal enforcement. Facilities were also chosen to represent the variety of compliance history information in the national program database and to ensure roughly even representation of MDNR's five regional offices.

The choice of particular facilities within each representative category was made as random as possible using the activity lists provided by MDNR. Because Missouri's inspection and enforcement activities in FFY 2013 are not present in the national program database, the EPA was unable to use the Enforcement and Compliance History Online (ECHO) SRF File Selection Tool but instead used random number generators and sorting of facilities on spreadsheets to minimize bias in the selection of facilities from each category. The 2 supplemental files were selected to enable the EPA Region 7 to better understand the nature of 2 potential concerns identified in the Data Metric Analysis. The 2 potential concerns are metric 7f1 – Non-major facilities in category 1 noncompliance; and metric 8a1 – Major facilities in SNC.

For all representative file selections, the EPA Region 7 plans to review all compliance monitoring and enforcement information that is present in MDNR's records. For example, if an inspection file has an enforcement action associated with it, both activities will be reviewed (and vice-versa when a selected enforcement action has an associated inspection record). The time period of interest is FFY 2013, but if the activity for which a facility was selected has an associated activity dated prior to or subsequent to this period of interest, the EPA Region 7 will review the associated activity as well.

File Review List for Missouri SRF Enforcement Review, CWA FY2013

<u>Permit #</u>	<u>Facility Name</u>	<u>Regional Office</u>	<u>Selection Rationale</u>
Core Program - Majors			
MO0023213	Dexter East Lagoon	SER	Representative Enforcement (abatement order on consent)
MO0023027	Sedalia North WWTF	KCR	Representative Enforcement (abatement order on consent)
MO0039659	Eureka WWTF	SLR	Representative Inspection
MO0040843	Marshfield WWTF	SWR	Representative Inspection
MO0105732	Noranda Aluminum, Inc.	NER	Representative Inspection
MO0036773	Simmons Foods, Inc.	SWR	Supplemental - majors in significant noncompliance
Core Program - Minors			
	Aurora Grand Meat Co.	SWR	Representative Enforcement (consent judgment)
MO0088072	Brandco Investments, LLC	SER	Representative Enforcement (abatement order on consent)
MO0023663	Drexel South WWTF	KCR	Representative Enforcement (abatement order on consent)
MO0044881	Peaceful Acres	SLR	Representative Enforcement (administrative order)
MO0057363	Little City MHP	NER	Representative Enforcement (consent judgment)
MO0133833	Kari's Cupboard and Camp	SWR	Representative Enforcement (AGO referral)
MO0053708	Lake Adelle Sewer District	SLR	Representative Enforcement (NOV)
MO0114049	Mike's Total	NER	Representative Enforcement (NOV)
MO0101788	Nestle Purina Petcare Co.	SER	Representative Enforcement (NOV)
MO0106020	Snow Creek Ski Resort	KCR	Representative Enforcement (NOV)
MO0085952	BCSD, Sheridan Hill Subdivision	NER	Representative Inspection
MO0134112	The Boulders	SWR	Representative Inspection
MO0021423	Gideon WWTF	SER	Representative Inspection
MO0108758	Great Western Motel WWTF	KCR	Representative Inspection
MO0134147	JCSD, Mirasol WWTF	SLR	Representative Inspection
MO0099431	Potosi WWTF #1	SER	Representative SSO Inspection
MO0134791	Emory Creek Ranch Phases 3-4-5 WWTF	SWR	Supplemental - non-majors in Category 1 noncompliance
Pretreatment			
CIU000011	Bob Monnig Industries	NER	Inspection of Pretreatment Industry CIU
CIU000023	Cerro Flow Products, Inc.	NER	Inspection of Pretreatment Industry CIU
CIU000032	Advanced Industries, Inc. - Kelly St.	KCR	Inspection of Pretreatment Industry CIU

CIU000033	Thorco Industries, Inc. at Butler	KCR	Inspection of Pretreatment Industry CIU
CIU000025	Gates Corporation	SWR	Pretreatment Municipal Inspection
CIU000002	Scroll Compressors, LLC	SWR	Pretreatment Municipal Inspection
CIU000021	Tracker Marine - Ozark	SWR	Pretreatment Municipal Inspection
MO0094846	Jefferson City Water Reclamation	NER	Pretreatment Municipal Inspection
MO0097837	Columbia Regional WWTP	NER	Pretreatment Municipal Audit
MO0043648	Poplar Bluff Municipal WWTP	SER	Pretreatment Audit
MO0050580	Cape Girardeau Municipal WWTF	SER	Pretreatment Municipal Inspection
MO0089010	Lebanon WWTF	SWR	Pretreatment Audit
MO0103349	Joplin Turkey Creek WWTF	SWR	Pretreatment Municipal Inspection
MO0023043	St. Joseph Water Protection Facility	KCR	Pretreatment Municipal Inspection
MO0033286	Maryville WWTF	KCR	Pretreatment Municipal Audit
MO0101702	Exide Tech - Canon Hollow	KCR	Inspection of Pretreatment Industry CIU
	CAFOs		
MO0119962	Sharpe Holdings	NER	Representative Enforcement (penalty order)
	Twin Hills Farms	SWR	Representative Enforcement (administrative order)
MOGS10175	Jeffrey Miller Broilers	KCR	Representative Enforcement (LOW)
MOG010504	Larry Long	SWR	Representative Enforcement (LOW)
MOG010451	Danny Bevill	NER	Representative Inspection
MOGS10063	Deppe Farms, Inc.	SLR	Representative Inspection
MOG010227	Ponderosa, LLC	KCR	Representative Inspection
MOG010339	Roger Schnake	SWR	Representative Inspection
MOGS10407	Turkey Hill	NER	Representative Inspection
	MS4		
MOR040070	Calloway County MS4	NER	Representative Inspection
MOR040027	Poplar Bluff MS4	SER	Representative Inspection
	Stormwater – Land Disturbance Permitted Sites		
MOR10A196	Gravois Bluffs Estates	SLR	Representative Enforcement (penalty order)
MORA01168	Lake Van Loo Estates	NER	Representative Enforcement (LOW)
MORA00503	West Elementary School	KCR	Representative Enforcement (NOV)
MORA00283	Chesterfield Blue Valley	SLR	Representative Inspection
MORA00190	Emerald Lake	NER	Representative Inspection
MORA00353	Project Fres	KCR	Representative Inspection
MORA02213	Southern Hills Shopping Center	SER	Representative Inspection
	Stormwater - Industrial		
MOR240266	Lincoln County Farmers Coop	SLR	Representative Enforcement (abatement order on consent)
MOR203205	M-D Bldg Products	SER	Representative Enforcement (AOC and penalty)
MOR60A146	Shapiro Brothers, Inc.	SLR	Representative Enforcement (tolling agreement)

MO0129224	AFB International	SWR	Representative Enforcement (LOW & NOV)
MOR22C023	F&S Pallet, Inc.	KCR	Representative Enforcement (LOW & NOV)
MOG490926	Sedalia North WWTF	KCR	Representative Enforcement (LOW)
	MoDOT Lamar Maintenance Facility	SWR	Representative Enforcement (NOV)
MOR130033	International Paper	KCR	Representative Inspection
MOG491065	Paris Ready Mix	NER	Representative Inspection
MOR22A020	Stanton Manufacturing	SWR	Representative Inspection
MOR80C214	UPS Sikeston	SER	Representative Inspection

Appendix B: MDNR Compliance and Enforcement Program Overview

[Note: The information below is extracted from MDNR's external website at <http://www.dnr.mo.gov/env/wpp/enf/index.html>.]

Missouri's natural resources provide for our health, well being and enjoyment. Making sure Missouri's citizens, communities and enterprises comply with the legally required environmental protection measures is the least each of us can do to help sustain ourselves and our neighbors. The environment we live in today and leave to our children should be the best we can make it.

Department staff are expected to work cooperatively with anyone who has an environmental problem or concern, throughout the process of solving it. The department is always available to offer services up front to prevent problems. Where problems occur, the department will work with the parties involved to resolve the problems as quickly and productively as possible.

There are several purposes served by the department's compliance and enforcement role. The primary role is to achieve regulatory compliance with environmental laws. At a minimum, this protects human health and the environment. It also supports economic development opportunities and the quality of life in Missouri.

If a problem persists, the department must resort to stronger means to address it. Any problem that is not solved must be quickly elevated to the next stage so that threats to citizens' health and Missouri resources are addressed promptly. Staff are directed to use the full range of compliance tools to solve environmental problems and address as many aspects of the problem as possible. Since the department has limited resources, compliance and enforcement work also performs the important function of deterring noncompliance. Compliance and enforcement actions ensure a level playing field for those dealing with pollutants and contaminants – no one should make a profit at the expense of the health and resources of Missouri citizens.

Department staff follow a [compliance manual](#) for all enforcement actions. The department's regional office staff follow an [operation manual](#) to conduct inspections and begin investigations.

Missouri State Operating Permit, or National Pollutant Discharge Elimination System

The Missouri Department of Natural Resources requires a permit for all facilities that discharge or have the potential to discharge to waters of the state. If the department finds a facility operating without a permit, the department will take necessary action against the facility to obtain the necessary permit and bring the facility back into compliance.

Enforcing the Missouri Clean Water Law

The department's primary compliance and enforcement responsibility and statutory obligation is to work with a facility to achieve compliance. The facility must ensure a sustainable solution is in place so the facility will reach and remain in compliance and thereby ensure protection of the environment. Approximately 90 percent of the department's enforcement actions are resolved informally through conference, conciliation and persuasion, which is a statutory process for handling noncompliance.

Conference, conciliation and persuasion consist of verbal or written communications between authorized representatives of the department and a party in violation. Conference, conciliation and persuasion is a central concept in achieving compliance and is required by several state environmental laws. Department staff can use this concept any time non-acute violations are detected. The purpose is to encourage prompt correction of violations in a productive way. A formal enforcement action must be taken if the violations are not promptly corrected.

Conference, conciliation and persuasion also provides opportunities to handle enforcement cases through informal methods and strives to resolve any finding of noncompliance with statutes, rules, permits or other enforceable provisions.

Conference, conciliation and persuasion is a focused and time limited process that will not exceed 90 days to correct the violation and is neither required nor appropriate if the violations:

- Represent an imminent and serious threat to human health, public welfare or the environment;
- Appear to be intentional or result from negligence or are otherwise criminal; or
- Have a required response specified in rule or guidance.

Enforcement Actions

In cases where the violations are not resolved through conference, conciliation, and persuasion, the department may use formal enforcement actions to obtain compliance, including but not limited to Settlement Agreements, Abatement Orders, Abatement Orders on Consent, Consent Judgments and Court Orders. These agreements include the negotiated actions and a schedule for the responsible party to achieve compliance at the facility or site and pay any civil penalty or damage amounts assessed for the violations. The department also has the option to refer a case the Attorney General's Office to represent the department in legal action against a responsible party to obtain a court order requiring compliance. Referral to the Attorney General's Office can occur when:

- The responsible party and the department are unable to reach an agreement to correct the violations.
- The responsible party fails to comply with a formal enforcement action initiated by the department.
- The violations are an imminent and serious threat to human health, public welfare or the environment.

Formal Enforcement Actions

Descriptions of Formal Enforcement Actions

Abatement Order on Consent – is a negotiated administrative or abatement order between a responsible party and the department that resolves past violations and establishes a schedule to correct violations. The effective date of an abatement order on consent is the date the department signs the document. They are not appealable. Failure to comply with the requirements of an consent can result in the payment of stipulated penalties and referral to the Missouri Attorney General’ Office to pursue legal action against the responsible party in circuit court.

Abatement Order- is a unilateral order issued by the department requiring a responsible party to take action to correct violations. A responsible party may appeal an abatement order to the Administrative Hearing Commission within 30 days. If an appeal is not filed, the abatement order becomes final and fully enforceable. Failure to comply with the requirements of an abatement order can result in the payment of stipulated penalties and referral to the Missouri Attorney General’ Office to pursue legal action against the responsible party in circuit court.

Settlement Agreement - is a negotiated agreement between a responsible party and the department and the Attorney General’s Office that resolves past violations and establishes schedule to correct the violations. Failure to comply with the requirements of a settlement agreement can result in the payment of stipulated penalties and referral to the Missouri Attorney General’ Office to pursue legal action against the responsible party in circuit court.

Consent Judgment – is a negotiated court order between a responsible party, the Attorney General’s Office and the department resolving past violations alleged in a petition and establishes a court enforceable schedule to correct the violations.

Judgment or Order - After a case has been filed and litigated through a final hearing, a judge may issue a judgment or order in the case. The judgment or order may contain injunctive relief and civil penalties. Because the violator did not agree to the judgment or order, the violator can appeal it to a court of appeals. A federal consent decree is form of a final order.

Links to lists of the Water Protection Program’s active enforcement cases can be found on MDNR’s internet site. The list includes the operating permit number, the facility name, the owner and indicates if the case has been referred to the Attorney General’s Office. These lists are updated monthly and are organized by facility name and by county for a more accessible search.

Links to the Water Protection Program’s recent enforcement actions can also be found on MDNR’s internet site. These reports provide an overall view of the department’s enforcement actions achieved during a month timeframe. Such actions include the number of enforcement cases received from the regional offices, number of cases resolved,

number and description of agreements reached, and number of cases referred to the Attorney General's Office with corresponding litigation actions.

Appendix C: File Review Summaries for the SRF Review

Core Program

Emery Creek Ranch (MO0134791)

Inspection date(s) and # days to report: 4/17/13 (44)

Inspection notes: The inspector wrote in bold type in the inspection report that “Every DMR submitted to this office from 9/11 through 3/13 reflects noncompliance for the exceedance of ammonia as N.” The inspection report also states the January and February 2013 DMRs were unsigned.

Enforcement action date(s): The inspection report was transmitted on 5/31/13 with a LOW. The LOW, in addition to the violations cited in the previous paragraph notes that trees and woody vegetation were present at the facility and the absence of a sign notifying the public that the facility is a WWTF.

Enforcement action notes: The AG filed a Motion for Injunctive Relief and Civil Penalties. The Defendant did not file an answer. The AG filed for a default judgment against the Defendant. The file also contains an affidavit from the inspector.

Other notes: The most recent document in the file is dated in September 2013. It is not possible to know the current status of the actions and/or the compliance status of the facility.

Dexter East Lagoon (MO0023213)

Inspection date(s) and # of days to report:

January 21, 2010 (28)

July 14, 2011 (50)

November 13, 2013 (56)

Inspection notes:

January 21, 2010

The facility address is missing from the inspection report. The permit status is not listed in the inspection report. The inspector did not include a narrative description of their field activities. The inspection checklist was not found in the electronic files. The data checklist does not indicate that the facility received a NOV from the EPA on 07/24/2009. Bradley K. Ledbetter did not sign and approve the inspection report. The inspection report does not ask for items to be corrected. The MDNR stated: “It is recommended that the City continue its efforts in fine tuning the new system to bring the facility into compliance. Despite the compliance issues associated with the East Lagoon, both of the City's wastewater treatment lagoons appear to be well maintained.”

July 14, 2011

Inspection report was issued 50 days after the inspection, missing the 30 day deadline. The 2010 inspection report identified that SSOs were an issue for the City. The inspection report did not report the facility's SSO information to determine if they were still an issue. Ammonia limit permit requirements still an issue for the facility.

November 13, 2013

Inspection report was issued 56 days after the inspection, missing the 30 day deadline. The 2013 inspection report identifies that the facility has installed upgrades to the facility and is receiving an activated sludge from a similar facility. However, the facility continues to exceed its permit limits for ammonia.

Enforcement action date(s):

NOV- July 16, 2010; December 21, 2010; September 2, 2011

ACO - March 25, 2013

Enforcement action notes:

An NOV followed the January 21, 2010 inspection report on July 16, 2010. The NOV was issued 147 days after the inspection report was sent to the facility on February 19, 2010. The facility has not met ammonia limits in the years it has discharged. MDNR mentions that the facility is in significant noncompliance in one NOV dated July 16, 2010. The facility has needed extensions to meet the ACO. The facility is now on its fourth extension. The ACO does not define economic benefit. The file does not contain any information to identifying that the penalty was suspended two years.

Other Notes:

Noranda Aluminum, Inc. (MO0105732)

Inspection date(s) and # days to report: May 1, 2013 (8)

Inspection notes: The facility address is not defined in the inspection report. The inspector does not provide a general description of the facility. The inspector does not define which pertinent regulations will be evaluated for compliance with the facility's permit. The inspector does not define the number of outfalls present for the facility; however, inspector visits Outfalls 001-006. The facility's stormwater drains to Outfall 004. The inspector was not able to reach Outfall 004 to what appears to be a flood event. The pond berms appear to be very near the river and the outfall is under water. The inspection report identifies that samples were taken, yet not available at the time of submission to the facility. Unknown if a checklist is used in an inspection.

Enforcement action date(s):

Enforcement action notes:

Other notes:

BCSD Sharidan Hills Subdivision (MO0085952)

Inspection date(s) and # days to report:

September 26, 2012 (54)

March 22, 2013 (67)

Inspection notes:

The FFY13 inspection found nearly identical compliance issues to the inspection that was performed in FFY12. The facility discharged in violation of their permit and caused impairment to a state waterbody. The state required the facility to respond by July 28, 2013. MDNR lab chain of custody did not define the date and time the sample was analyzed to determine if holding times were met. Presence of blood worms within the discharge pathway indicates chronic sludge issues with the discharge. No escalation of the violations could be found in the electronic record.

Enforcement action date(s):

Enforcement action notes:

Other notes:

Peaceful Acres Investments, LLC (MO0044881)

Inspection date(s) and # days to report: December 5, 2012 (56)

Inspection notes: Inspector does not define how many outfalls are utilized by the facility. This does not allow the auditor to determine if all of the outfalls have been inspected. An overview description of the facility would be useful to show the entire facility, allowing a reviewer the opportunity to determine if the entire facility was inspected. The inspection report was not issued in 30 days.

Enforcement action date(s):

LOW- January 30, 2013

ACO- August 19, 2013

Enforcement action notes:

The LOW was issued with the inspection report 56 days after identifying the issues in the inspection. The AO was issued 201 days after the facility had not come into compliance with the LOW/Inspection Report. The ACO states that the facility installed a chlorination system onto the facility. The inspection report does not mention this addition. The LOW does not mention this addition. The electronic file does not identify this discovery.

Other notes:

Lake Adele Sewer District (MO0053708)

Inspection date(s) and # days to report: January 7, 2013 (28)

Inspection notes: Inspector notes that the facility had not submitted its Sludge Report per the permit by April 22, 2011.

Enforcement action date(s): LOW – February 5, 2013

The LOW states that the facility did not submit the Sludge Report due by April 22, 2011. The facility replied on March 8, 2013 that the report was submitted to the SLRO on December 6, 2012. The SLRO responded on March 28, 2013 stating that the LOW is considered resolved and the facility is in compliance. The SLRO office does not mention that the facility's Sludge Report is 594 days late. There is no information in the file to determine if SLRO granted a time extension for the sludge report.

Enforcement action notes:

Other notes:

Nestle Purina Petcare Co (MO0101788)

Inspection date(s) and # days to report:

Inspection notes:

Enforcement action date(s):

LOW- November 19, 2012

NOV- January 21, 2013

Enforcement action notes:

The facility was issued an LOW (11/19/12) and an NOV (11/21/13) for two consecutive TSS violations that occurred on 9/30/12 and 10/30/12. The 2013 NOV also identified that the facility did not submit their DMR for the 4th Quarter sampling for Outfall #002. Many warning letters were found within the official file.

Other notes:

MoCWIS is currently being developed so that the system can batch upload to ICIS. At the time of the SRF, the batch uploading process was not complete. As a result, the ECHO reports are not accurate to the state database.

Snow Creek Ski Resort (MO0106020)

Inspection date(s) and # days to report:

Inspection notes:

Enforcement action date(s):

LOW- December 12, 2012

Enforcement action notes:

The LOW required the facility to submit the missing DMRs from August and September 2012. The facility was issued a reminder letter on December 11, 2012 to submit the missing August 2012 DMR. MDNR issued a LOW on December 12, 2012 informing the facility that the August 2012 and September 2012 DMRs were missing; 72 days after the violation. The facility submitted their missing DMRs on December 17, 2012. MDNR issued the facility a reminder notice on April 25, 2013 to inform the facility that their Status/Progress Report had not been submitted. The facility report at the time of the reminder letter the report is 90 days late. This letter granted the facility an extension for submission of the report until May 22, 2013. This extension allows the facility to submit the report 117 days past their permit milestone of January 25, 2013.

Other notes:

Gideon WWTF (MO0021423)

Inspection date(s) and # days to report: January 9, 2013 (8)

Inspection notes:

The facility is a non-discharging lagoon. The lagoon uses a center pivot to land apply to 76 acres. The inspection does not indicate if records were reviewed during the inspection.

Enforcement action date(s):

Enforcement action notes:

Other notes:

Great Western Hotel WWTF (MO0108758)

Inspection date(s) and # days to report:

November 19, 2012 (99)

April 11, 2013 (44)

Inspection notes:

Inspection reports were very detailed. Inspectors evaluated all areas of the facility including identifying the areas that were beyond the lagoon cells.

Enforcement action date(s):

February – December 2012 “...at least fifty (50) Letters of Warning have been issued to Great Western Hotel for failure to submit timely and complete DMRs.”

NOV – May 25, 2012

CC&P – July 5, 2012

LOW – July 12, 2012

NOV – February 28, 2013

NOV – April 4, 2013
 NOV – April 4, 2013
 NOV – May 16, 2013
 LOW – April 11, 2013

Enforcement action notes:

The facility entered into settlement agreement with MDNR on April 21, 1999. The facility was required to correct its deficiencies. The correction of the deficiencies would result in a \$1,000 penalty and \$12,000 suspension of the penalty. The facility appeared to be in compliance until June 13, 2007. At the time of the FFY13 SRF, the facility has now received greater than 50 LOWs. The LOWs and NOVs the facility has received identify identical compliance issues. The facility has made little to no attempt to correct the compliance issues identified in two inspections which resulted in two NOVs. The facility also received an additional nine enforcement actions due to non-submittals of DMRs and DMR exceedances. The facility is consistently in noncompliance. The MDNR issued the initial NOV 44 days after the November 19, 2012 inspection. The July 12, 2012 LOW was issued to the facility 174 days February 2012-May 2012 DMRs were not submitted. MDNR issued the February 28, 2012 NOV 101 days after the inspection. MDNR issued the nine April 4, 2013 NOVs to the facility for non-submittals of DMRs and DMR deficiencies. These submittals to the facility are for the following violations and response times by MDNR.

DMR Deficiency	DMR Month	NOV Issuance	MDNR Response Time
Non-submittal	March 2012	April 4, 2013	368 days
Non-submittal	October 2012	April 4, 2013	154 days
Non-submittal	December 2012	April 4, 2013	93 days
DMR Parameters not Reported - Flow - Temperature - Ammonia as N	February 2012	April 4, 2013	372 days
DMR Parameters not Reported - Flow - Temperature - Ammonia as N	April 2012	April 4, 2013	311 days
DMR Parameters not Reported - Flow - Temperature - Ammonia as N	May 2012	April 4, 2013	280 days
DMR Parameters not Reported - Flow - Temperature - Ammonia as N	June 2012	April 4, 2013	250 days
DMR Parameters not Reported	September 2012	April 4, 2013	158 days

- Flow - Temperature - Ammonia as N			
DMR Parameters not Reported - Flow - Temperature - Ammonia as N	January 2013	April 4, 2013	35 days

An LOW was submitted to the facility on April 11, 2013 for not submitting their annual payment of the permit fee. This was issued to the facility 59 days after the permit fee was not submitted. MDNR issued an NOV to the facility on May 16, 2013 as a response to the facility not submitting their annual permit payment. This payment was due on February 17, 2013. The NOV was issued 89 days after the permit fee was not submitted. MDNR has begun penalty calculations and economic benefit is considered. These penalty calculations are being completed in FFY14.

Other notes:

The Boulders (MO0134112)

Inspection date(s) and # days to report: November 21, 2012 (8)

Inspection notes:

Inspection was thoroughly explained so that a reviewer could easily piece together the process and scope of the inspection. No compliance issues were found.

Enforcement action date(s):

Enforcement action notes:

Other notes:

Aurora Grand Meat Co. (unpermitted)

Inspection date(s) and # days to report: 8/22/2012 (29 days); 6/11/2013 (62 days)

Inspection notes: MDNR first inspected Aurora Grand Meat Co. (AGMC) and detected noncompliance in April 2010 and conducted a follow-up inspection with issuance of an NOV in June 2010. This sequence of inspections, which the EPA did not review against the Inspection File checklist, culminated with the settlement agreement described below. The 8/22/2012 inspection confirmed that AGMC had not completed the requirements of the Schedule of Compliance in the settlement agreement and also failed to remit payment of suspended penalties under the terms of the agreement. Finally, MDNR conducted an investigation of an environmental concern on 6/11/2013 based on allegations of a septic, failing lagoon. The inspection report stated that the facility has been in noncompliance since 2010 despite that a new consent judgment was signed in 2012. Both inspection reports were conveyed with NOVs, but the latter NOV did not articulate what MDNR expected the facility to correct.

Enforcement action date(s): 10/23/2012 (LOW), 7/10/2013 (LOW); 11/8/2012 (Consent Judgment)

Enforcement action notes: Both LOWs required a response from the facility within 10 days, but no response was obtained. MDNR originally signed a settlement agreement with AGMC in February 2011 for failure to properly operate a lagoon system. Because no recourse was achieved through this action, MDNR proceeded to refer the matter to the state Attorney General approximately August 2012, the time of the former post-settlement agreement inspection. This

constitutes a prompt referral of the matter. A consent judgment was issued promptly on 11/8/2012, ordering the facility to design, get permitting for, and complete construction of a process wastewater holding system and land application structure; and to close the original lagoons. It also ordered payment of a \$3,000 penalty by 12/8/2012, with an additional \$2,000 held in suspension for 2 years. As of the date of this program review, AGMC was in contempt of court for having failed to complete any of the items in the consent judgment.

Other notes: Because the state AG issued the consent judgment, MDNR did not get any records on determination of the penalty.

Brandco Investments, LLC (MO0088072)

Inspection date(s) and # days to report: 5/9/2012 (34 days)

Inspection notes: MDNR sent an inspection report with NOV to the facility on 6/12/2012 following the 5/9/2012 inspection. It was a well-documented inspection report, with the exception that it excluded previous instances of noncompliance that were outstanding at the time of inspection.

Enforcement action date(s): 6/12/2012 (NOV); 10/2/2012 (referral to MDNR-WPP); 12/26/2012 (litigation request)

Enforcement action notes: The NOV following the May inspection identified two violations in the NOV: The facility had not completed its permit compliance schedule for installing disinfection and failed to submit a permit renewal application by the due date almost one year earlier. The NOV appropriately identified these deficiencies as "serious violations" according to state Compliance Manual guidance. The WPP litigation request cited four categories of violations: 1) an SSO three months earlier; 2) failure to abide by the disinfection schedule of compliance in the permit, which called for a final compliance date of December 2011; 3) absence of a certified operator; and 4) failure to submit a permit renewal application almost one year earlier. It was a timely enforcement response for the first of these violations but lagged the state's date of becoming aware of the latter three violations by margins of 180 days, two years, and nearly one year, respectively. The penalty calculation accounted for both gravity and economic benefit, including a robust consideration of avoided cost categories. As a litigation request, this action did not lead to any documentation in the state's files regarding negotiation and collection of penalties.

Other notes: None

Sedalia North WWTF (MO0023027)

Inspection date(s) and # days to report: 12/30/2011 (54 days)

Inspection notes: MDNR conducted a fish kill investigation, determining that the cause of the kill on 12/28 was an SSO or sewage discharged from a wastewater outfall. The inspection report included all the items on the EPA inspection file checklist except information on the permit status of the facility.

Enforcement action date(s): 2/22/2012 (NOV); 6/13/2013 (Abatement Order on Consent)

Enforcement action notes: The NOV was transmitted to the City with the investigation report. It cited the unauthorized discharge and required a response from the City. On 7/12/2012, MDNR initiated negotiations with the City on an appropriate penalty and sent a draft AOC on 3/20/2013, with a request for a response by 4/20/2013. The AOC requires the City to pay a penalty of \$1,000 plus state investigative costs and to report on its progress or completion of a SEP by

6/13/2014. The City is required to spend at least \$31,183 on the stream cleanup and restoration SEP.

Other notes: Fish kill was SNC but MDNR did not call it out as such.

Drexel South WWTF (MO0023663)0

Inspection date(s) and # days to report: 3/23/2012 (96 days)

Inspection notes: MDNR conducted a complaint investigation. The investigation report did not have a date and lacked information on the permit status of the facility, but it included the other items on the EPA inspection file checklist.

Enforcement action date(s): 6/27/2012 (NOV); 6/13/2013 (Abatement Order on Consent)

Enforcement action notes: MDNR began using CC&P and informal enforcement tools to address effluent limit exceedances in June 2011. Two NOVs in March 2012 addressed discharges from an unpermitted outfall, operation and maintenance failures, pollution to waters of the state, and sampling deficiencies. The 6/27/2012 NOV accompanied the report for the 3/23/2012 complaint investigation, citing discharges from a constructed bypass, overtopping of a berm at the WWTF, and non-operational aerators. That NOV also cited BOD and TSS violations from November 2010 through July 2012. It did not ask for any corrective actions by the facility, although the investigation report body did so. A referral for enforcement from the Kansas City Regional Office to MDNR-WPP immediately preceded this NOV on 5/11/2012 and was succeeded by an internal enforcement recommendation on 10/23/2012. While some of the violations were addressed in a timely manner according to MDNR's Compliance Manual, others were not. The escalation sequence was appropriate, if not timely. The AOC required several categories of injunctive relief and payment of a \$2,500 civil penalty with suspension of an additional \$7,500 for two years contingent on compliance with the AOC.

Other notes: About one year from becoming aware of ongoing effluent hits to enforcement referral; another 1yr + 1mo from referral to order.

Eureka WWTF (MO0039659)

Inspection date(s) and # days to report: 12/19/2012 (20 days)

Inspection notes: The report for this inspection accounted for all the items on the EPA's Inspection File Checklist and was transmitted to the facility 20 days following the inspection. Eureka is a major facility, but the violations identified in the report do not rise to the level of SNC according to state or federal definitions.

Enforcement action date(s): 1/8/2013 (LOW)

Enforcement action notes: MDNR sent an LOW to the facility with the inspection report. Violations identified by the LOW include failure to mark an outfall and to provide potable water to facility staff. The LOW required a response from the facility within 30 days, and the state's file for the facility included a letter responsive to the LOW.

Other notes: None

Simmons Foods (MO0036773)

Inspection date(s) and # days to report: 5/14/2013 (63 days)

Inspection notes: MDNR conducted a wastewater inspection at Simmons Foods. The body of the inspection report identified the following violations: a bypass that did not cause water quality problems, deficient laboratory procedures, and chain of custody shortcomings. The cover letter for the report requested a written response from the facility by 7/31/2013, but the letter did not

articulate whether violations had been found during the inspection. Items on the EPA's Inspection File Checklist that were missing from this inspection report include the facility address, permit status, a description of permit requirements evaluated against, and a clear compliance determination.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: MDNR used CC&P to obtain resolution to these violations. According to the state's Compliance Manual, no type of formal or informal enforcement was warranted for these violation types. Although the cover letter to the inspection report was not labeled as an LOW or NOV and did not clearly identify any violations, it did refer the facility to the inspection report and requested a response within two and one-half months.

Accurate SNC determination

Marshfield WWTF (MO0040843)

Inspection date(s) and # days to report: 11/1/2012 (104 days)

Inspection notes: The state's inspection of Marshfield led to a report that included most of the items on the EPA's Inspection File Checklist, with the exclusion of permit status information, results from sample analyses, and the report writer's signature. The inspection report generated a clear determination that the facility was out of compliance.

Enforcement action date(s): 1/11/2013 and 2/13/2013 (LOWs)

Enforcement action notes: MDNR sent the first of these LOWs to address a pH exceedance in October 2012, requiring a written response from the facility within 15 days of receipt. The City responded accordingly. The second LOW served as an inspection report transmittal for the November inspection and identified the City's failure to re-evaluate local limits according to the permit Schedule of Compliance. The LOW required the City to contact the state pretreatment coordinator by April 2013 for discussion of the matter and to complete the local limits re-evaluation by 8/1/2013. The City sent a responsive document on 5/13/2013.

Other notes: The City's failure to complete a local limits re-evaluation constitutes SNC under the federal definition and should have been identified as such to the facility but was not. This violation constitutes SNC because it concerns a permit required pretreatment report that was overdue more than 90 days (approximately 14 months) at the time the LOW was issued.

Mike's Total (MO0114049)

Inspection date(s): 8/27/2013 (16 days)

Inspection notes: The state conducted a compliance inspection at this facility and discovered several violations that were well documented in the report. The report contained nearly all of the items from the EPA's Inspection File Checklist. Although the inspection report was complete, MDNR should have discovered and identified one of the violations one year earlier. In particular, a permit renewal application was due to MDNR 180 days prior to the permit expiration, which predated the inspection by six months.

Enforcement action date(s): 9/12/2013 (NOV)

Enforcement action notes: MDNR issued the NOV in conjunction with the inspection report and requested a response from the facility within three weeks. The file included the facility's response, consisting in part of a facility closure plan that would negate the need to renew the permit.

Other notes: None

JCSD Mirasol WWTF (MO0134147)

Inspection date(s): 4/11/2013 (11 days)

Inspection notes: The MDNR inspection report contained sufficient information to inform a compliance determination and found the facility to be in compliance. However, the EPA identified three concerns with the completeness and accuracy of information in the report. The report contained an inaccurate permit number for the facility. The facility address was missing from the report, and the results from sample analysis had not yet been received from the laboratory when the report was finalized. MDNR should either hold the report until analytical results can be reviewed and incorporated into the report or send to the facility and the file a report addendum.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Potosi WWTF (MO0099431)

Inspection date(s): None during FFY 2013

Inspection notes: The EPA selected this facility on the premise that MDNR conducted an SSO inspection during FFY 2013. Upon review of the facility file, however, the EPA discovered that the FFY 2013 inspection was a routine compliance inspection, whereas the SSO inspection took place during FFY 2012. For this reason, the EPA did not review this facility file any further and excluded it from file metrics data.

Enforcement action date(s): None

Enforcement action notes: None

Other notes: None

Little City MHP (MO0057363)

Inspection date(s) and # days to report: 9/12/12 (36 days)

Inspection notes: The state's inspection of Little City led to a report that included most of the items on the EPA's Inspection File Checklist, with the exclusion of SIC code identification and the report was slightly late. Of note, while the facility was notified of the inspection and the state obtained permission to enter the property, no representative of the facility was present during the inspection. The inspection report generated a clear determination that the facility was out of compliance.

Enforcement action date(s): Multiple NOV's beginning in November 2001, May 2004, May 2009, November 2009, October 2010, October 2012, and AGO referral on 11/8/10

Enforcement action notes: MDNR sent the November 2009 NOV to address failure to renew its NPDES permit and failure to submit DMRs. No record of an attempt at CC&P exists, however EAR was sent 12/03/09. The violations were then referred to the AGO on 11/8/10 and final resolution in the form of a Consent Judgment was obtained 9/9/13. The settlement penalty collected is \$5,000.

Other notes:

Kari's Cupboard and Camp (MO0133833)

Inspection date(s) and # days to report: 10/25/11 (10/26/11 date of report)

Inspection notes: The state's inspection of Kari's Cupboard and Camp led to a report that included most of the items on the EPA's Inspection File Checklist, with the exclusion of SIC

code identification and failure to identify participant from the facility. The inspection report generated a clear determination that the facility was out of compliance.

Enforcement action date(s): Multiple (5) NOV's beginning in November 2011, EAR October 2011, and AGO referral February 2013 (previous NOV's were sent and attempt at CC&P in 2009, however they were rescinded when the facility informed MDNR that they were no longer in operation).

Enforcement action notes: MDNR inspected the facility in October 2011 and the inspection revealed numerous failures to submit DMRs, unmarked and improper outfall, significant O&M violations (does not have 2 pumps operating), no disinfection, no flow equipment and no alarm. The facility was generally non-responsive until AGO involvement and responded to an AGO letter June 2013 and on July 2013. There was no further communication from AGO until July 2014, when an email notes other priorities. The matter is not yet resolved.

Other notes:

Land Disturbance Permitted Sites

Southern Hills Shopping Center (MO-RA02213)

Inspection date(s) and # days to report: 2/14/13 (15) & 3/15/13 (10)

Inspection notes: During the 2/14/13 inspection the site was found to have several (none very serious) failure to install and failure to maintain BMP violations. The body of the inspection report states that the items need to be fixed in seven days and that DNR would conduct a follow-up inspection "in the near future."

A follow-up inspection was conducted on 3/15/13. During the inspection the inspector documented that all BMPs had been installed and/or maintained and that the site was in compliance.

Enforcement action date(s): none

Enforcement action notes: none

Other notes:

Project Fred (MO-RA00353)

Inspection date(s) and # days to report: 7/26/13 (39)

Inspection notes: The inspector found the facility to be 100% completely built and stabilized. The report body states that the site is finished and recommends the facility submit Form H and request termination of the permit since the permit does not automatically expire.

Enforcement action date(s): none

Enforcement action notes: none

Other notes: The inspection report was unsigned by the inspector but the cover letter was signed by a KCRO environmental manager.

Emerald Lake (MO-RA00190)

Inspection date(s) and # days to report: 4/4/13 (8)

Inspection notes: This inspection was conducted in response to receipt of Form H- Request to Terminate Permit Coverage for this site. The site was found to be fully stabilized.

Enforcement action date(s): none

Enforcement action notes: none

Other notes:

Chesterfield Blue Valley (MO-RA00283)

Inspection date(s) and # days to report: 1/9/13 (13)

Inspection notes: The cover letter refers the facility to the inspection report in which the inspector finds the site to be in compliance.

Enforcement action date(s):

Enforcement action notes:

Other notes:

West Elementary School (MO-RA00503)

Inspection date(s) and # days to report: 2/7/13(61) & 6/4/13 (23)

Inspection notes: The inspection revealed several violations: no complete copy of permit or SWPPP onsite, public notification sign was inside the construction trailer, failure to install BMPs, sediment deposition in street and inlet, runoff overtopping silt fence surrounding storm sewer inlet box, turbid water in excess of permitted SS limit entering storm inlet, and silt fence in need of repair.

Enforcement action date(s): NOV issued 4/9/13 and was transmitted with the narrative inspection report.

Enforcement action notes: The facility sent a response dated 5/23/13 as required by the NOV. The response described corrective actions taken to address the violations.

Other notes: MDNR conducted a follow-up inspection on 6/4/13 and determined the facility had returned to compliance with the exception that the public notification sign was not displayed as required by the permit.

Lake Van Loo Estates (MO-RA01168)

Inspection date(s) and # days to report: 7/2/13 (8)

Inspection notes: The inspection was conducted in response to a complaint received from a concerned citizen. The inspector found the site had allowed pollutants to enter waters of the state, failure to install BMPs, failure to provide a copy of the SWPPP during the inspection, and failure to conduct and document site inspections.

Enforcement action date(s): LOW issued 7/10/13 and was transmitted along with a copy of the narrative report.

Enforcement action notes: The LOW required a response by 7/31/13. The facility sent a timely response documenting corrections made (including photos), a copy of the SWPPP and copies of inspection reports.

Other notes: Upon receipt of the letter, photos, SWPPP, and copies of site inspection records, MDNR sent a letter to the facility stating they had returned to compliance. In addition, MDNR sent a letter to the complainant stating that an inspection had been conducted, violations were discovered and being followed-up on.

Gravois Bluffs Estates (MO-R10A196)

Inspection date(s) and # days to report: 2/27/09 (14) The first of many inspections/site visits and was done in response to a complaint. None of the inspections documented for the site were conducted in FFY13.

Inspection notes: Many violations were documented during the 2/27/09 inspection including: inadequate BMPs allowed sediment to migrate offsite; sediment in excess of the SS limit was

observed in the stream; discharge caused violation of the WQS; failed to implement and maintain BMPs; no SWPPP (?).

Enforcement action date(s): A NOV was issued in response to the 2/27/09 inspection. 4 additional inspections were conducted and at least two additional NOV's were issued. In the meantime, the facility submitted a Form H to request termination of the permit which was denied because although construction had ceased the site was not fully stabilized. The site was referred to the central office for enforcement on 2/8/10. The central office in turn referred the site to the AGO for enforcement on 2/23/11 because the site owner had not responded to MDNR's pre-filing letter. The central office requested the AG to seek penalties and injunctive relief for compliance.

Enforcement action notes: The file contains a fully executed consent agreement dated 11/30/12. The consent agreement requires the facility to fully stabilize the site and submit Form H requesting termination of the permit within 180 days of the execution date of the agreement. Furthermore, the facility must pay a penalty of \$50,000. \$20,000 of the total penalty amount will be suspended if the facility complies for 2 years. The penalty calculation did not account for economic benefit. The file contained a copy of the check in the amount of \$30,000. It does not appear the site achieved final stabilization. A June 2013 email states it was too early to pursue contempt of court for the failure to achieve final stabilization. The most recent email in the file states the facility was maintaining interim BMPs while the effort to stabilize was ongoing and that it was close to "wrapping up."

Industrial Stormwater

UPS Sikeston (MO-R80C214)

Inspection date(s) and # days to report: 2/20/13 (51)

Inspection notes: The facility submitted a no exposure certification form and requested that permit coverage be terminated based on no exposure. The file contains a letter dated 11/21/12 from MDNR to the facility stating that the facility was granted a no exposure certification (certification # MO-NX00247) based on an investigation of the facility on 11/16/12. The file did not contain documentation from the 11/16/12 investigation.

Enforcement action date(s): none

Enforcement action notes: none

Other notes:

International Paper (MO-R130033)

Inspection date(s) and # days to report: 7/18/13 (35)

Inspection notes: The inspector found the facility to be in compliance with the permit conditions. The inspector did, however, recommend that the SWPPP be updated and that empty drums should be stored upright and sealed.

Enforcement action date(s): none

Enforcement action notes: none

Other notes: The inspection states that the facility is on the St. Joseph CSO and discharges to the CSO. I wondered if stormwater permit coverage was necessary. However, the NOI did identify Candy Creek as the receiving stream.

Stanton Manufacturing (MO-R22A020)

Inspection date(s) and # days to report: 2/8/12 (16)

Inspection notes: The inspector found the facility had no SWPPP as required by the permit, no self-site inspections had been conducted and documented, wood chips were blown onto the ground near a storm drain, and a large amount of sawdust and wood chips were in the tributary at the discharge location.

Enforcement action date(s): NOV 14680 SW was issued on 4/12/13.

Enforcement action notes: The NOV and report narrative that accompanied the NOV alerted the facility that noncompliance was found during the inspection. The cover letter states that the facility must reply to MDNR within seven days and describe actions taken to correct noncompliance discovered during the inspection. The engineer hired by the facility responded on 4/19/13 and stated that a SWPPP would be developed within thirty days, a copy of which would be sent to MDNR.

Other notes: There is nothing in the file dated after 4/19/13. It is therefore not possible to know if the facility submitted a complete SWPPP, implemented its provisions and returned to compliance.

MoDOT Lamar Maintenance Facility (N/A)

Inspection date(s) and # days to report: 5/7/13 (36)

Inspection notes: MDNR conducted an investigation of this facility on 5/7/13 in response to a spill that occurred on 4/29/13. MDNR characterized the violation as a spill/release to the environment of a water/oil emulsion from an asphalt pile which discharged to an unnamed tributary of the North Fork of Spring River.

Enforcement action date(s): NOV issued 6/12/13

Enforcement action notes: The cover letter/NOV stated: *“You are requested to submit a written response within 30 calendar days of the date of this letter that includes an Operations & Maintenance Plan that explains the process taken to clean up the illicit release, and actions taken to prevent a future recurrence.”* MoDOT’s response states that a berm had been constructed around the pile and that the asphalt was oilier than usual. MoDOT said it was trying to use the pile as quickly as possible. Furthermore, MoDOT stated that the supplier of the asphalt was going to remove and appropriately dispose of the underlying stained soil as soon as the pile was completely used.

Other notes: It does not appear MDNR conducted a follow-up inspection to ensure MoDOT’s intended plan was carried out. The file was closed based on MoDOT’s response.

Missouri Red Quarries (MO-G490926)

Inspection date(s) and # days to report: 1/10/13 (28)

Inspection notes: MDNR conducted an inspection on 1/10/13 and documented the facility had no SWPPP as required by the permit.

Enforcement action date(s): LOW issued 2/7/13.

Enforcement action notes: The LOW states the facility must take action to correct the violation but does not require a response and/or submittal of a site SWPPP to MDNR. However, the facility did submit a copy of a SWPPP dated March 2013 to MDNR.

Other notes: The inspector either did not record all of the findings or once realizing the facility had no SWPPP did not conduct a complete inspection. The file does contain pictures of the outfalls. However, there is no discussion in the inspection report of the facility’s processes, BMPs in place or needed, site inspection reports, good housekeeping, employee training and other permit requirements.

F & S Pallet (MO-R22C023)

Inspection date(s) and # days to report: N/A (n/a)

Inspection notes: The file contains a few LOWs and NOVs for failure to pay renewal fees associated with the permit. All file activity pertains to the outstanding permit fees. The file does not contain an inspection of the site.

Enforcement action date(s): There are several. In FFY13, a LOW was issued on 11/8/12 and a NOV was issued on 7/19/13.

Enforcement action notes: Based on the documentation in the file it does not appear the fees were paid in full.

Other notes:

AFB International (aka Bioproducts, Inc.) (MO-0129224)

Inspection date(s) and # days to report: 3/26/13 (17)

Inspection notes: MDNR conducted an inspection on 3/26/13. The inspector observed two outfalls that discharge stormwater that were not identified in the permit. There were additional deficiencies identified during the inspection but they related exclusively to the land application requirements in the permit.

Enforcement action date(s): LOW issued 4/12/13.

Enforcement action notes: The LOW states the facility must provide a written response to MDNR within 15 days describing actions taken to correct the noncompliance observed during the inspection. The facility responded with a letter dated 4/25/13 which stated the facility conducted its own investigation and actually found 3 additional stormwater outfalls and would make sure the outfalls were identified in the upcoming application to renew the facility's permit. The permit expired 11/23/13. Both OTIS and the MDNR website indicate the permit remained expired on 3/12/14.

Other notes:

Paris Ready Mix (MO-G491065)

Inspection date(s) and # days to report: 10/25/12 (40) and 5/15/13 (7)

Inspection notes: MDNR conducted an inspection on 10/25/12. The inspector contacted the owner/operator on the way to the inspection and was informed the facility was no longer in operation. The inspector performed the inspection, observed no spills or discharges and states in the report that all materials stored outside should be removed. The inspector further documented that while in operation the facility had failed to submit DMRs and annual operations reports. LOWs and NOVs were issued to this facility on a parallel track for failure to renew the permit and submit permit fees to MDNR. The site was again inspected on 12/4/12. The same observations were made. The site was inspected on 5/15/13. The inspector states the previous violations are ongoing and the site is being referred to the central office for enforcement. The body of the inspection report further states that corrective action in response to the outstanding LOWs and NOVs (submittal of DMRs, Annual reports) must now be coordinated with the central office.

Enforcement action date(s): Several LOWs and NOVs were issued to this facility over the period of a few years both for the programmatic violations described above and for the failure to renew the permit and pay permit fees. NERO drafted a referral to the central office requesting formal

enforcement on 5/21/13. However, it appears the request was not sent at that time. The file contains a 1/31/14 memo from NERO to the central office in which a formal request for enforcement was made.

Enforcement action notes: The central office sent a letter to the facility owner on 2/7/14 inviting settlement of the outstanding violations. In the letter MDNR states it will forego formal enforcement if the facility removes all materials stored outside and submits all DMRs and annual reports for the time period they are missing (sometime in 2009 to the present). MDNR further states it will accept a statement explaining why the documents are missing in lieu of their submittal along with a payment of the outstanding permit fees (\$633) and a Form H to terminate the permit to settle the matter. The 2/7/14 letter allowed the facility until 3/31/14 to complete all required actions and respond to MDNR. This was the most recent item in the file on the 3/11/14 date of the EPA review.

Other notes:

Shapiro Brothers (MO-R60A146)

Inspection date(s) and # days to report: 9/14/11 (60)

Inspection notes: MDNR conducted an inspection on 9/14/11. The inspection revealed several violations, including the failure to prevent a discharge at a location other than a permitted (designated) outfall, allowing pollutants to enter the tributary to Plattin Creek, allowing water quality standards (for lead and cadmium) to be violated, not submitting reports, and failure to transfer the permit (new owner). The facility had been inspected earlier in 2011 and several of the same violations were observed during that inspection.

Enforcement action date(s): MDNR issued a NOV on 11/23/11 when transferring the inspection report for the 9/14/11 inspection. The NOV informed the facility that the facility was being referred to the central office for formal enforcement. In addition, the NOV required a response from the facility in 15 days. The facility sent a response to the NOV on 12/13/11. MDNR sent a second NOV on 12/6/11 based on results received from samples taken during the 9/14/11 inspection.

Enforcement action notes: SLRO sent a request for enforcement to the central office on 12/6/11. On 3/28/12 MDNR sent a letter to the facility outlining the violations, stating the need for an individual permit and development of a SWPPP (the general permit did not require a SWPPP), and the opportunity to negotiate a settlement including penalty. The file contains a tolling agreement signed 7/2/13. The tolling agreement is the formal enforcement credited in FFY13. The file also contains documents reflecting the more current status of the case. A fully executed order on consent dated 12/5/13 was in the file. The enforcement staff calculated a penalty of \$16,000. Kevin Mohammadi crossed out the \$16,000 calculated on the penalty worksheet and penciled in \$40,000. MDNR settled on a penalty of \$30,000 of which \$10,000 was suspended and \$20,000 paid. The file contains a copy of a check for \$20,000. The file also contains a copy of a check to MDNR for costs incurred in the investigation. The penalty calculation worksheet accounts for gravity but not economic benefit.

Other notes: MDNR received an application for a site specific permit on 3/4/13. The site specific permit will require a SWPPP. The facility hired a consultant to draft a SWPPP. MDNR commented on the SWPPP and a revised SWPPP was submitted to MDNR on 1/9/14 that incorporated the comments that had been received. It was not possible to determine if the facility had a current, effective permit at the time of the file review. MDNR had returned to the facility a NOI for the general permit and the facility was still developing the SWPPP in January 2014.

M-D Building Products (Loxscreen) (MO-R203205)

Inspection date(s) and # days to report: 3/8/11 (29)

Inspection notes: MDNR conducted an inspection on 3/8/11 at the request of the City of Hayti in which this facility is located. The city said the facility was causing a SSO. The facility sent treated process water to the facility on this date even though the city said they could not accept the water. The city had provided notice to the facility on 3/3/11 that it could not accept wastewater from the facility until further notice. The facility sent the treated process water anyway which resulted in an overflow from a manhole. The discharge (SSO) had odor, pH of 10.7, contained solids, and aluminum at 353,000 micrograms. The limit for aluminum was 750 microgram.

Enforcement action date(s): MDNR issued a NOV on 4/6/11 when transferring the inspection report for the 3/8/11 inspection. The NOV informed the facility that the facility was being referred to the central office for formal enforcement and required a response detailing actions taken to correct the SSO. Loxscreen sent a letter to MDNR dated 4/25/11 in which it states it makes observations of the manhole on an hourly basis and also blames the city for the events leading to the SSO on 3/8/11.

Enforcement action notes: SERO sent a request for enforcement to the central office on 4/6/11. MDNR sent a letter to Loxscreen on 7/13/12 inviting Loxscreen to negotiate a settlement for the SSO on 3/8/11. The parties reached settlement as memorialized in a fully executed AOC dated 12/6/12. Loxscreen paid a penalty of \$5,000 and paid MDNR's costs totaling \$2,676.60. The penalty worksheet denotes a penalty of \$10,000 was calculated for the case. Loxscreen offered \$2,500 and the parties agreed on \$5,000. There was no calculation of economic benefit in the original calculation. A 9/6/13 memo from Joan Doerhoff to Paul Dickerson states the facility paid the penalty and costs and demonstrated a return to compliance. The memo recommends the case be closed.

Lincoln County Farmers Coop (MO-R240266)

Inspection date(s) and # days to report: 4/25/12 (14)

Inspection notes: MDNR conducted an inspection on 4/25/12. The inspection was conducted in response to a fish kill. MDNR was notified of the fish kill by a MDC agent who observed it and informed MDNR on 4/25 of the need to investigate. The inspection report states the facility discovered that a valve had been opened (facility blamed vandals) and a tank emptied of agricultural chemicals. The inspection report reveals that the spill was not reported and no effort had been made by the facility to clean up the spill or prevent additional flows to the creek. The facility had even pumped out the secondary containment allowing more spilled chemical to reach the stream. The spill was cleaned up after the MDNR inspection.

Enforcement action date(s): MDNR issued a NOV on 5/9/12. The NOV required a response within 15 days detailing actions taken to correct the violation.

Enforcement action notes: SLRO sent a request for enforcement to the central office on 5/24/12 asking the Central Office to collect penalty for the chemical release and fish kill. MDNR sent a pre-filing letter to the facility on 7/5/12 offering a negotiated settlement that would include collection of a penalty, recovery of MDNR costs, agreement by the facility to add/increase secondary containment and agreement that spills must be reported. The file contains a fully executed settlement agreement dated 10/15/12. The facility agreed to pay a penalty of \$4,000,

reimburse MDNR for costs totaling \$3948.43, notify MDNR within 24 hours of a spill in compliance with the terms of the permit, and provide secondary containment. The agreement also contains a provision for stipulated penalties. The penalty calculation worksheet completed by MDNR originally had a penalty of \$12,000. Paul Dickerson crossed out the \$12,000 and decreased the penalty to \$4,000. It appears this change was made to assert the spill was a one day, not a three day event. The penalty calculation did not assess economic benefit.

Other notes: The file contains a 3/4/13 memo to file from Corinne through Joan Doerhoff to Paul Dickerson requesting the case be closed because the terms of the agreement had been fully met. The facility paid the penalty and costs, and all chemicals were moved indoors for storage in a designated chemical storage building. Furthermore, a berm and basin were constructed at the facility to collect all stormwater.

MS4

City of Poplar Bluff (MO-R040027)

Inspection date(s) and # days to report: 12/18/12 (30)

Inspection notes: MDNR conducted an inspection on 12/18/12. The inspection was a full inspection of the city's activities related to all six minimum control measures, records review, review of checklists, the SWMP, and the inspectors also visited city facilities, a storage yard and observed a private construction site inspection performed by city staff. The narrative report states the inspectors had a list of questions to help them conduct the inspection but the list was not included in the files reviewed by the EPA.

The inspector determined the city was in noncompliance, specifically that the SWMP did not comply with the requirements of the permit and the city had failed to develop and implement a few to several requirements associated with each minimum control measure. The narrative report that accompanied the cover letter informed the city that it must correct all deficiencies within 180 days and that MDNR may conduct a follow-up inspection.

Enforcement action date(s): none

Enforcement action notes: none

Other notes: MDNR also conducted an inspection of the Poplar Bluffs MS4 in November 2011. The program deficiencies documented during that inspection were almost identical to the findings from the 2012 inspection. The conclusion in the report from the 2011 inspection was that the city was in noncompliance, had 180 days to take corrective action and come into compliance, and that MDNR may conduct a follow-up inspection. MDNR may consider escalating its response since the level of noncompliance observed during two inspections of the Poplar Bluff program document failures in every program area.

Calloway County MS4 (MO-R040070)

Inspection date(s) and # days to report: 6/11/13 (34)

Inspection notes: MDNR conducted a targeted inspection of the Calloway County Illicit Discharge Detection and Elimination component of the MS4 program. The county was found to be in noncompliance with nearly every aspect of the IDDE requirements as outlined in the permit, including failure to develop a system map, failure to inspect outfalls and conduct dry weather screening, failure to develop and implement an ID detection plan, etc.

Enforcement action date(s): LOW issued 7/15/13.

Enforcement action notes: The cover letter (LOW) to the report required that Calloway county provide a written response to MDNR by 8/5/13 describing the corrective actions they would take to address the noncompliance observed during the inspection and a timeframe for completing the corrections. Calloway County sent MDNR a letter dated 7/31/13 in which they outlined a plan to address each violation documented during the inspection and committed to completing the corrections within 180 days. MDNR sent a letter to Calloway County dated 12/16/13 in which they reminded Calloway County that according to the commitment they made in the 7/31/13 response to the LOW they must be in compliance with the IDDE requirements in their permit by 7/31/14.

Other notes: It was clearly stated in the inspection report that the inspection was targeted and looked only at activities and compliance related to the IDDE program. The report stated MDNR's sole focus on IDDE during the inspection should not be construed to mean that the county was in compliance with the other MCMs in the permit.

Concentrated Animal Feeding Operations

Danny Bevill (MOG010451)

Inspection date(s) and # days to report (or send IT letter): 6/5/2013 (23 days)

Inspection notes: Discharge investigation report. The report did not contain the CAFO inspection checklist. Photos and samples were taken. Main determination from inspection is that facility had discharged into waters of the state. The report had 8 sections. These are: Introduction, Operational Description/History, Discussion of Investigation and Observations, Water Quality Monitoring, Compliance Determination, Notice of Violation, Unsatisfactory Features, Recommendations. Not all aspects of the CWA File Review checklist were completed. The facility was found to be non-compliant as reflected in the inspection write-up.

Enforcement action date(s): NOV issued to facility on 6/28/2013.

Enforcement action notes: Case also referred to Central Office (WPP) in Jefferson City for enforcement.

Other notes: Inspection included an extensive narrative write-up. Compliance determination was made (non-compliant) and promptly referred to WPP.

Deppe Farms Inc. (MOGS10063)

Inspection date(s) and # days to report or send IT letter: 3/14/2013 (14)

Inspection notes: This inspection was a non-sampling CAFO inspection that included the CAFO checklist. Photos were included in this inspection. No violations were noted in the inspection report. The report provided a good narrative write-up that included the following sections: Introduction, Facility Description/History, Discussion of Inspection and Observations, Observations and Findings, Compliance determination, Recommendations. The facility was found to be in compliance as reflected in the inspector's observations documented on the inspection checklist and narrative write-up. The report did make recommendations (add wall around composting pile, research cost to purchase and install calibration equipment). Reviewer did notice that neither box was checked for "stream observed" on the checklist, however in the remarks section there was a comment that "no impact to stream observed".

Enforcement action date(s): none

Enforcement action notes: none

Other notes: None

Ponderosa LLC (MOG010227)

Inspection date(s) and # days to report or send IT letter: 6/12/2013 (76)

Inspection notes: This inspection was a non-sampling CAFO inspection that included the CAFO inspection checklist. Three photos were included in the report. The facility was found to be in compliance as reflected in the inspector's observations documented on the CAFO checklist. No narrative was completed for this inspection. Not all aspects of the CWA NPDES File review checklist were completed.

Enforcement action date(s): none

Enforcement action notes: none

Other notes: No narrative write-up for this inspection report. Not all items in the Inspection file checklist were answered.

Roger Schnake (MOG010339)

Inspection date(s) and # days to reporter send IT letter: 6/11/2013 (17)

Inspection notes: This inspection was a non-sampling CAFO inspection that included narrative, the CAFO inspection checklist, and photos. The facility was found to be in non-compliance as reflected in the inspector's observations documented in the inspection checklist and narrative write-up. The inspection found 2 unsatisfactory features. First the owner had failed to apply for a permit, and second, the owner failed to submit the 2012 annual report. The report provided a narrative write-up that included the following sections: Introduction, Operational Description/History, Discussion of Inspection, and Unsatisfactory Features.

Enforcement action date(s): Letter of Warning was issued on 6/28/2013 (17 days after inspection).

Enforcement action notes: None

Other notes:

Turkey Hill LLC (MOGS10407)

Inspection date(s) and # days to report: 8/1/2013 (28)

Inspection notes: Discharge investigation report. The report did not contain the CAFO inspection checklist. Photos and samples were taken. Not all aspects of the CWA NPDES file review checklist were completed. Main determination found during the inspection was that the facility had discharged. The facility was found to be non-compliant as reflected in the narrative write-up. The report contained 7 sections: Introduction, Operational Description/History, Discussion of Investigation, Water Quality Monitoring, Compliance Determination, Notice of Violation, Recommendations.

Enforcement action date(s): NOV issued 8/29/2013. (sent out 28 days after investigation).

Enforcement action notes: Case referred to Central Office (WPP) on 8/29/2013.

Other notes: Excellent narrative, promptly referred to WPP.

Sharpe Land and Cattle

Inspection date(s) and # days to report: 9/15/2011 (Report completed and sent to facility on 11/1/2011 (46 days).

Inspection notes: Discharge investigation report. The report did not contain the CAFO inspection checklist. Photos and samples were taken. Extensive narrative write-up was completed. Not all aspects of the CWA NPDES File Review Checklist were completed. The facility was determined to be non-compliant as reflected in the narrative write-up. The facility discharged.

Enforcement action date(s): NOV issued 11/1/2011. Administrative Order for Compliance signed on 1/28/2013 (1 year, 3 months after referral).

Enforcement action notes: Case referred to the Central Office (WPP) on 11/1/2011. Penalty Matrix Worksheet was completed.

Other notes: Documentation in the file showing Terms of the AOC were fulfilled and case has been closed. MDNR negotiated a settlement for \$20,000. Penalty started at \$40,000. MDNR also received administrative costs for \$1925.80. Letter in file to MDNR which states 2 checks are enclosed. No economic benefit calculated.

Twin Hills Farms (Unpermitted)

Inspection date(s) and # days to report: Inspection not reviewed for this case. First complaint was September 2010 (improperly disposing dead animals). On 4/8/2011 MDNR staff observed runoff

discharging from facility (over 1,000 head of cattle at facility). MDNR completed approximately 5 on site investigations from 2010-2012.

Inspection notes: This facility was operating above 1,000 open cattle feedlot without a permit. FO completed multiple visits to this site.

Enforcement action date(s): NOV issued 10/13/2011

Enforcement action notes: Field office issued NOV on 10/13/2011. About 6 months after 4/8/2011 inspection where discharge was documented. Field office referred case to Central Office on 2/22/2012. On 7/24/2013 MDNR reached a Settlement Agreement with Respondent to pay \$1,500 of a \$6,000 penalty and to pay \$1,602.98 in MDNR costs. No economic benefit was calculated.

Other notes: Difficult drawn-out case (recalcitrant respondent). Respondent indicated inability to pay. MDNR does not have a process in place to check this (ability to pay). (AG does have some ability to do this). Did not see any rationale for not figuring economic benefits, this would have been an appropriate case for calculating. Documentation in the file showing 2 checks mailed to MDNR for penalties discussed above. Also evidence in file that issues at the facility have been corrected. NRCS was involved.

Jeffrey Miller Broilers (MOGS10175)

Inspection date(s) and # days to report (or send IT letter): 3/27/2013 (65 days)

Inspection notes: This was a non-sampling CAFO inspection that included the inspection checklist. Photos were included in this inspection. The facility was found to be in non-compliance as reflected in the inspector's observations documented in the CAFO checklist and narrative write-up. The report included a narrative write-up which included the following sections: Introduction, Participants, Facility Description/History, Inspection Description/Observations, Compliance Determination, and Unsatisfactory Features.

Enforcement action date(s): LOW/IT letter issued 5/31/2013.

Enforcement action notes: Documentation in file indicates that issues were corrected 6/10/2013. This was 75 days from the inspection.

Larry Long (MOG010504)

Inspection date(s) and # days to report (or send IT letter): 10/3/2012 (33 days)

Inspection notes: This was a non-sampling CAFO inspection that included the inspection checklist. Photos were included in this inspection. The facility was found to be in non-compliance as reflected in the inspector's observations documented in the CAFO checklist and narrative write-up (owner failed to apply for renewal of permit). The report included a narrative write-up which included the following sections: Introduction, Operational Description/History, Discussion of Inspection and Observations, Unsatisfactory Features, Recommendations.

Enforcement action date(s): An LOW/IT letter was issued 33 days after the inspection. On 11/30/2014 case was referred to the Central Office. On 9/10/2013 MDNR received an application for a permit. An Administrative Order on Consent was signed on 1/10/2014.

Enforcement action notes: Penalty started out at \$4,000. MDNR decided to forgo penalty. TCRs in the file indicating he couldn't pay the permit fee. Did not locate any documentation in the file that penalty included economic benefit.

Other notes: Respondent eventually applied for an NPDES permit.

Concentrated Animal Feedlot Overall Summary:

In most cases inspections were sent out to the facilities in a timely manner. Also cases were referred to the central office in a timely manner. There was one review where the inspection report only had the completed CAFO checklist and no narrative write-up. One of the enforcement case reviews noted that it took several visits and about 6 months to issue an NOV for significant non-compliance. The EPA suggests including an aerial photograph with each inspection and label buildings, pens etc. Suggest also showing where photographs were taken on aerial photograph as well.

Pretreatment File Reviews:

The facilities chosen for Pretreatment SRF review were taken from a list of Pretreatment inspections for FFY 2013 provided by MDNR. From the list, eight Significant Industrial Users located in non-Pretreatment program cities were chosen along with eight POTWs that received either a Pretreatment audit or Pretreatment Compliance Inspection. Of the eight industries, one was coded incorrectly, Exide Tech – Canon Hollow, and actually a direct discharger holding an NPDES permit. Consequently, this facility was not reviewed and is not discussed in the findings below.

From the list of inspections in FFY 2013, a conscious effort was made to select evenly from across each field office. This was done because at the last program review, MDNR was beginning to initiate greater participation by the field offices in the Pretreatment program. For over 20 years, all Pretreatment program audits or PCIs were conducted by the Pretreatment Coordinator from the Jefferson City central office. So this year's program review is an evaluation of MDNR's move from a centrally implemented Pretreatment program to a regional office based implementation. Two industries and two approve Pretreatment program inspections were selected from the NERO, SERO, SWRO, and Kansas City office. There were no inspections reported to have been performed in the Saint Louis Regional Office for FFY 2013.

Inspections of Categorical Industrial Users Outside Pretreatment Program Cities

Bob Monning Industries, Glasgow (CIU000011)

Inspection date(s) and # days to report: 11/01/2012 (91)

Inspection notes: The inspection was well done and comprehensive. Particularly detailed was the description of the production process. In addition, because the facility certifies that it has no discharge of process water, a detailed description was given of the wastewater treatment (precipitation) and recycle system. The violations for failing to submit no-discharge statements were discussed in the inspection report and clearly identified as the reason for the NOV.

Enforcement action date(s): NOV, at time of inspection report transmittal on January 31, 2013

Enforcement action notes: The NOV was for the failure of the industry to submit semiannual reports on continued compliance. Specifically, the facility failed to submit certified statements that they had had no discharges during the respective reporting period.

Other notes: The inspection report notes that a checklist was used to direct the inspection. However, a copy of the checklist was not included as an attachment to the inspection report. Moreover, it was not supplied to the EPA as part of the file for this industry as part of this program review. Consequently, it is not known if the checklist is part of the permanent record kept on this industry. It should be. Even though the narrative report was informative, there will be additional information in the checklist that needs to be preserved.

Cerro Flow Products, Shelbina (CIO000023)

Inspection date(s) and # days to report: 02/14/2013 (74)

Inspection notes: The inspection provided a thorough description of the manufacturing process and the products produced. The report acknowledged that the facility is subject to a production based standard, i.e., the discharge allowance is based on the amount of product produced.

Information was provided on solvent recovery, which is informative as this facility has a TTO

limit. The facility tests for TTO semiannually rather than oil and grease as a surrogate pollutant. There was no mention in the inspection report that the production levels reported by the facility were verified. It was also not mentioned on whether the facility operates a pretreatment system.

Enforcement action date(s): No enforcement action resulted from this inspection.

Enforcement action notes: NA

Other notes: While there was no discussion in the inspection report on production levels, periodic compliance reports that were part of the industry file submitted to the EPA contain production information. While the inspection report states that a field checklist was used, it was not attached to the inspection report nor part of the overall file supplied to the EPA. Checklists are very informative and should be part of the permanent record of the inspection even if they are not sent with the facility inspection report.

Advanced Industries, Odessa (CIU000032)

Inspection date(s) and # days to report: 09/26/2013 (102)

Inspection notes: The inspection report was sufficiently descriptive to understand the facility's operations and regulated process. The report identifies four Unsatisfactory Features and clearly states the Required Actions needed for each. Response to these Actions were required, per the report, to be to the Department no later than January 20, 2014.

Enforcement action date(s): January 6, 2014.

Enforcement action notes: The transmittal letter identified itself as a Letter or Warning. The inspection documented late reports and periodic chromium violations. The facility replied to the LOW 11 days later on January 17, 2014 and reported that they are purchasing a chrome removal system.

Other notes: The inspection report contained a copy of the inspection checklist used during the inspection. This provided additional important information showing activities at the facility. The checklist stated that Advanced is subject to the Metal Finishing regulations at 40 CFR 433.15. These are Pretreatment standards for Existing Sources. If Advanced installed its regulated process line after August, 1981 it would be subject to 433.17, the Pretreatment Standards for New Sources.

Thorco Industries, Butler (CIU000033)

Inspection date(s) and # days to report: 09/12/2013 (no report)

Inspection notes: No inspection report for FFY13 was provided to the EPA. An inspection was conducted on September 10, 2012 (FFY 2012) which was reviewed, but not evaluated as it is outside the FFY 2013 time period. Also in the file was a January 18, 2013 letter stating that Thorco had closed. However, it was not clear that this in fact occurred as there were semiannual reports also in the file for June 2013 and December 2013.

Enforcement action date(s): NA

Enforcement action notes: NA

Other notes:

Gates Corporation, Versailles (CIU000025)

Inspection date(s) and # days to report: 04/24/2013 (23)

Inspection notes: The inspection report consisted of a one page narrative of findings and recommendations with the checklist used to conduct the inspection attached. While no violations were identified of the Gates facility, the inspection narrative noted that the city had violated its

NPDES permit monthly average effluent limits for zinc for five months in 2012. A recommendation was made that Gates voluntarily reduce its zinc discharge and that Gates and the city need to “explore options” for resolving the city’s zinc violations, including the possibility of developing a local limit. A copy of the report was also sent to the city.

Enforcement action date(s): NA

Enforcement action notes: NA

Other notes: The attached inspection checklist was complete and informative. From the information provided, one could tell flow rates, pollutant types, treatment system capacities, and sludge generation. The rinse rate was reported at 3 gpm which is a level that ensures the facility is not diluting its way into compliance with a concentration based limit.

The EPA inspected Gates and the city in January, 2011 because of observed elevated zinc levels in the city’s sludge. It was found that Gates had experienced a pH probe malfunction only a few days before the city’s annual sludge sample. In closing out the inspection, the EPA noted its analysis indicated that under certain conditions, the city could be in violation of its NPDES permit even while Gates was compliant with its Categorical standard. From MDNR’s inspection report of April 2013, this is occurring. The General Pretreatment Regulations at 40 CFR 403.5(c)(2) require that any non-Pretreatment program city that has experienced pass through that is expected to recur to develop a local limit to prevent this. Therefore, the city needs to be required to develop a local limit for zinc as soon as practicable.

Scroll Compressors, Ava (CIU000002)

Inspection date(s) and # days to report: 04/11/13 (26)

Inspection notes: Observed during this inspection, and other inspections from this Regional Office, is checking on the availability of the approved Solvent Management Plan. The inspector notes that the facility certifies that they are adhering to the requirements of the Plan in order to not need to sample to demonstrate compliance with the Total Toxic Organic limit. When it is discovered that the Plan can’t be found, the inspector requires it be located or a new one be drafted. This is an excellent practice as one can’t certify to be implementing something they cannot locate. If the certification is to mean anything, the Solvent Management Plan has to be followed.

Enforcement action date(s): NA

Enforcement action notes: No enforcement action taken.

Other notes: The inspection report notes that the facility has violated the city’s sewer use ordinance oil and grease limit of 100 mg/l. Since the city, Ava, does not have an approved Pretreatment program, this is not a limit the State has the authority to enforce under the Pretreatment program. The attached checklist notes that the facility generates two tons of sludge per month, however, the checklist also indicates the facility does not have any wastewater treatment. How is this possible? In addition, the checklist indicates that the facility rinses its processed parts at a rate of 15 gpm. This is excessive as 5 gpm is recognized as an aggressive rinse rate. Also, past nickel levels in the city’s sludge have indicated that Scroll may have been discharging nickel above its Categorical standard limits. When brought to the industry’s attention, they indicated that they were intending to eliminate nickel plating. While this process is not listed in the inspection checklist as being performed, the chemicals identified on site include nickel nitrate. What is this used for?

On the inspection checklist, for pollutants of concern metals and cyanide are listed, presumably because these are regulated by the applicable Metal Finishing regulations. However, only the pollutants found on site for this facility should be listed, e.g. nickel, manganese.

Tracker Marine, Ozark (CIU000021)

Inspection date(s) and # days to report: 04/04/13 (21)

Inspection notes: The inspection report consists of a two page narrative, a copy of the checklist used in the field, and the test results from an early MDNR sampling inspection the previous September. The report identified three areas of minor noncompliance and required their correction. These were: the inability to locate the Solvent Management Plan for TTO control, not analyzing pH within 15 minutes of taking the sample, and not properly certifying their periodic compliance reports. In addition, the facility was asked to provide a water balance as it was not readily available while on site as they had recently replaced a three stage phosphating system with a five stage one.

Enforcement action date(s): NA

Enforcement action notes: No enforcement taken

Other notes: The attached inspection checklist raised a few concerns. Listed as raw material for the manufacture of boat trailers was galvanized steel. Also listed was iron phosphating as the regulated Metal Finishing process. It is the EPA's experience that galvanized material cannot be subject to phosphate conversion coating and the facility routinely remain compliant with zinc limitations without a wastewater treatment system. Because the water balance was not available to the inspector it can't be determined if the rinse rates are excessive. The inspection report shows no wastewater treatment but indicates that one 55 gallon barrel of sludge is generated per month. (It also states that less than 2 such barrels are generated per year, so it's not clear what's going on). Also, later in the checklist it is stated phosphorous soap wash is the process regulated by the Metal Finishing standards. It is not clear if this is in addition to the already identified iron phosphating or if this is considered the regulated process. If it is the regulated process, it is not clear if there is an acid present to actually phosphatize the metal, although phosphate acid is listed as part of the industry's chemical inventory.

Audits and Pretreatment Compliance Inspections of Approved Pretreatment Programs

Jefferson City, Pretreatment Compliance Inspection (MO0094846)

Inspection date(s) and # days to report: 04/24/2013 (37 days)

Inspection notes: The inspection report consisted of a five page narrative. Although it stated that a checklist was used during the PCI, one was not attached to the report. The files submitted to the EPA for review did not contain a copy of the checklist. From the observations made in the narrative it could be determined that the PCI had been sufficiently detailed. The report was comprehensive and well written and included a description of an oversight inspection conducted with the city of Modine Manufacturing, a Categorical industry regulated by the city.

Enforcement action date(s): NA

Enforcement action notes: No enforcement action was taken, however, the transmittal letter of May 31, 2013 required the city to respond to the Recommendations section of the report by June 21, 2013. The file shows the city responded by June 11, 2013 and reported how the two items of concern had been corrected.

Other notes: Inspection strengths: the narrative format provides a forum for describing in detail the condition of the city's implementation activity. The PCI included an oversight inspection which was also documented in details that allowed for the assessment of the city's understanding of the industrial facility.

Inspection weakness: The checklist that was used for the PCI was not attached or provided to the EPA for review. It is not clear if it is considered part of the permanent record for this facility, although it should be. The narrative report, while well written, concentrates on, and only documents, a few aspects of what was observed during the PCI. Including the completed checklist would provide information on all other implementation responsibilities, policies, and activities evaluated during the PCI.

Columbia, Pretreatment Audit (MO0097837)

Inspection date(s) and # days to report: 10/10/2012 (316)

Inspection notes: The inspection report consisted of a four page narrative write up. The report stated that a checklist was used to direct the inspection, however, it was not attached to the narrative. A copy of the checklist was not included in the documents provided to the EPA for review so it is not known if it is considered part of the permanent record for this facility, as it should be. Without the completed checklist to review it cannot be determined if the audit evaluated all requirement elements of Pretreatment program implementation.

Enforcement action date(s): NA

Enforcement action notes: The audit found no violations and no unsatisfactory features.

Other notes: Inspection strengths: The audit report was well written and gave good details for those aspects of the implemented program it discussed. The inspection consisted of two oversight inspections of SIUs regulated by the city. The inspections covered both the regulated processes where wastewater is generated and the wastewater treatment systems. From the descriptions of both, one can tell the inspector knows a lot about wastewater treatment. The city was properly advised on how to remove a facility from its Pretreatment program that is no longer an SIU

Inspection weaknesses: No inspection checklist was included with the narrative report so it could not be determined if all implementation responsibilities had been evaluated. The report lists two recent improvements the city has made to its program (local limits revised in 2011, Enforcement Response Plan changes in 2012) but did not state if they had been submitted and approved by MDNR. There was some confusion concerning Significant Noncompliance. Specifically, the term technical noncompliance was used when what was meant was employing the use of the technical review criteria (TRC) for calculating Significant Noncompliance. Applying the TRC factor is one of the two ways data sets are evaluated to determine if a facility is in SNC. Lastly, the city stated that at the time of the Pretreatment audit they did not have any industries in noncompliance. Since they had issued Kraft foods a number of NOV's for minor pH violations, by definition Kraft had to be in Infrequent Noncompliance at the very least. (A follow-up check of the city's annual report for the time frame indicated they classified Kraft appropriately).

Poplar Bluff, Pretreatment Compliance Inspection (MO0043648)

Inspection date(s) and # days to report: 04/04/2013 and 06/04/2013 (15)

Inspection notes: The inspection was conducted in two visits two months apart. Once completed, the findings were conveyed to the facility within 15 days. The narrative portion of the report was contained in a short letter to the facility. The inspection checklist was an attachment to the letter.

Enforcement action date(s): NA

Enforcement action notes: The inspection found the facility to be in compliance.

Other notes: Inspection strengths: A completed checklist was included. Two oversight inspections were conducted of SIUs as part of the PCI.

Inspection weaknesses: There were a couple of confusing or contradicting statements made between the letter narrative and the checklist. The letter stated that the two Gates facilities were considered in SNC for metals limits in 2012. A statement was then made that appeared to state that the permit limits were based on Categorical standards that did not apply. The attached checklist listing the compliance status for the two Gates plants did not show them in SNC for that time period. Did the inspector make the corrections? If so this should have been stated. Also, Question 30 indicates that the city did not need to adopt local limits. However, it appears they are including non-adopted limits in permits they are issuing. If they were not adopted, they cannot be enforced. Furthermore, Question 37 indicates they compare local limits to Categorical limits before issuing a permit. If the local limits were not adopted, then the city has no local limits to compare to Categorical standards. These discrepancies need to be rectified.

Cape Girardeau, Pretreatment Compliance Inspection (MO0050580)

Inspection date(s) and # days to report: 06/18/2013 (7)

Inspection notes: The inspection consisted of a cover letter, a brief summary of what was reviewed, and the finding that the city was successfully implementing its approved Pretreatment program. A copy of the checklist used during the PCI was attached to the transmittal letter.

Enforcement action date(s): NA

Enforcement action notes: No deficiencies or violations were found as a result of the PCI

Other notes: Inspection strengths: The report was turned around within one week. The inspection checklist provided a top-to-bottom evaluation of all program implementation activities. The city evaluates its local limits quarterly.

Inspection weaknesses: There was no narrative discussion outside a few general remarks made in the June 25, 2013 transmittal letter. The checklist indicated that the city is considering taking hauled waste from Republic landfill. If this is the same Republic landfill in St. Louis that has caused concerns for St. Louis MSD, some discussion is warranted. There has been a change in staff in Cape but this was not discussed. The checklist identifies that the city's Pretreatment ordinance was modified on August 15, 2011, however, it cannot be determined if this change was submitted to MDNR for review and approval. Question 2 of the checklist did not reflect an approval date for this change.

Lebanon, Pretreatment Audit (MO0089010)

Inspection date(s) and # days to report: 04/25/2013 (22)

Inspection notes: The inspection consisted of a two page narrative of findings with an attached completed field checklist. A letter of transmittal conveyed the report to the facility within 30 days of the inspection. Two industrial user oversight inspections were conducted as part of the audit.

Enforcement action date(s): NA

Enforcement action notes: No enforcement resulted from this inspection as the city was not found to be in noncompliance.

Other notes: Inspection strengths: The report contained both a narrative covering salient findings and a checklist documenting the total program activities. The inspector was savvy enough to recognize that the city is prohibited by state statute to be able to fine greater than \$500.

Inspection of the city's files could find no Solvent Management Plans that allows Metal Finishing facilities to certify compliance with TTOs rather than sample. The city is required to locate their copy or request a copy from the industry and ensure that the industries are implementing them.

Inspection weaknesses: Two oversight inspections were conducted as part of the audit, however, there was no discussion of their findings. The narrative notes that the city has had recent NPDES permit violations for copper which the city does not believe is related to its industrial users. There is no elaboration of how this might be so; e.g., are the copper NPDES limits so low that domestic level copper discharges could have caused the violations? Was hardness taken into consideration when the NPDES limit was developed? The inspector does, however, inform the city that they need to determine the cause of the copper noncompliance. The checklist at Question 30 states the city did not adopt local limits (they were evaluated in 1996) but at Question 37 states that the city compares local limits to Categorical limits when issuing permits. How can that be? The checklist states that 40% (0.96 mgd) of the city's 2.4 mgd flow is industrial but the flows reported on the table of SIUs only add up to 0.1184 mgd, or 5%.

Joplin, Pretreatment Compliance Inspection (MO0103349)

Inspection date(s) and # days to report: 05/09/2013 (29)

Inspection notes: The inspection report consisted of two page narrative with attached completed field checklist. During the PCI one oversight inspection was conducted.

Enforcement action date(s): NA

Enforcement action notes: No violations were found during the PCI that warranted enforcement.

Other notes: Inspection strengths: The checklist contained an attached table of all enforcement actions taken by the city for the period covered by the PCI. The narrative contained a detailed description of the industrial base and how the number of industrial contributors to each plant. The report was issued in a timely manner.

Inspection weaknesses: Because the checklist does not cover observations made during the oversight inspection it should have had more coverage in the narrative. The checklist indicates that the city's Sewer User Ordinance was modified in 1998, however, there is no record at Question 2 that this modification was approved by the MDNR. The narrative states that Jasper Products caused the city's Shoal Creek plant to violate its NPDES permit. According to the General Pretreatment Regulations, this constitutes Significant Noncompliance [403.8(f)(2)(vii)(C)], however, in the table of industries and compliance status, Jasper Products is shown to be in full compliance. Also, Jasper's interference is not documented at Questions 28 and 29 of the checklist.

St. Joseph, Pretreatment Audit (MO0023043)

Inspection date(s) and # days to report: 09/12/2013 (160)

Inspection notes: Inspection report consisted of a one page narrative with an attached completed field checklist.

Enforcement action date(s): NA

Enforcement action notes: No enforcement taken as a result of this PCI, however, the city was instructed to locate its missing SIU inspection reports and provide a copy of the cover page and compliance determination to MDNR by March 13, 2014

Other notes: Inspection strengths: The MDNR required submission of documents that could not be found during the inspection.

Inspection weaknesses: The table of sampling frequencies at Question 29 cannot possibly be correct. The checklist states that the city's BOD and TSS limits are not technically derived, however, they are enforced as such. This is a program deficiency that needs to be corrected. Question 63 states that there are no industries from the last reporting period in SNC, yet the table of industries on page 13 shows three. These three industries are listed at Question 67 as having received Verbal Telephone Notifications for being in SNC. Does this follow the city's ERP for facilities in SNC? It is almost certain that the city's response does not.

Maryville, Pretreatment Compliance Inspection (MO0033286)

Inspection date(s) and # days to report: 09/25/2013 (147)

Inspection notes: The inspection report consisted of a brief two page narrative with the completed field checklist attached. One SIU oversight inspection was conducted. The PCI concluded that the city is properly implementing and maintaining its Pretreatment program.

Enforcement action date(s): NA

Enforcement action notes: No violations were found during the PCI that warranted enforcement.

Other notes: Inspection strengths: Good description of the oversight inspection including setting up for sampling and what pollutants to expect in the effluent. The attached PCI checklist was informative and completed coverage of the PCI that the narrative did not.

Inspection weaknesses: Two SIUs were in SNC in the second half of 2012 yet no enforcement actions were listed as having been taken. Was this an oversight by the inspector or is the city not following its Enforcement Response Plan? From the transmittal letter and the narrative, it does not appear that a representative from the city was present, or copied on the report. Since this is a contractor-run program, day-to-day implementation activities (inspections, sampling, data evaluation, permit drafting, etc.) can be performed by the contractor but enforcement and permit issuance cannot. Future inspections should include city participation or a comprehensive picture of program implementation is not achieved.

Pretreatment File Review Summary

This was the first Program Review conducted by the EPA since MDNR transitioned from a Central Office based Pretreatment audit and PCI program to one where the Regional Offices conduct the inspections. The transition appears to have gone fairly smoothly, as least for the four Regional Offices that reported conducting PCIs, audits, or Pretreatment industrial inspections in FFY 2013. As one would expect, there are differences in implementation from one Regional Office to another. Nevertheless, each RO shows a fundamental understanding of the Pretreatment program and its implementation demands.

When reviewing the inspection reports, quite a number of inspectors noted that the city's had the ability to level penalties up to \$1000 per day per violation. At the time the Pretreatment programs were approved in Missouri, only St. Louis MSD had legal authority granted by state statute to assess penalties for that amount. In fact, third and fourth class cities are still capped at \$500 per day. While it was not part of this Program Evaluation to determine which cities in Missouri are third or fourth class and limited in penalty assessment, it is recommended that MDNR conduct this exercise and create a list of those facilities that claim to have \$1000 penalty but that are not conforming to the state statutes limiting them.

The SRF checklist poses questions on whether the Pretreatment inspections are in ICIS (and by extension, ECHO). No Pretreatment audits, PCIs, or industrial user inspections are being uploaded into ICIS. For Pretreatment industrial user inspections, this is understandable as they are not given NPDES permit numbers. However, all approved Pretreatment Program Cities have the ability in ICIS to accept audit or PCI inspection dates as well as data elements for important inspection findings.

Appendix D: MDNR Response Letter

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

SEP 19 2014

Ms. Karen A. Flournoy, Director
Water, Wetlands and Pesticides Division
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219

Dear Ms. Flournoy:

This letter is in response to your July 31, 2014 letter requesting review of the draft integrated report of the Missouri Department of Natural Resources permitting and enforcement program for federal fiscal year 2013. The following represents the Department's comments on findings as well as additional explanation where necessary.

Basic Facility Information and Permit Application

Category 1 – Federal rules require that permit applications for major Publicly-Owned Treatment Works (POTWs) include three priority pollutant scans (40 CFR 122.21(j)(4) and 40 CFR 122.21 Appendix J), but the Department is only requiring one scan from major POTWs. The Department recently modified its Form B2 to require major POTWs to submit three priority pollutant scans. See <http://dnr.mo.gov/forms/780-1805-f.pdf> which identifies on Page 7 the requirement to submit three scans.

Water Quality-Based Effluent Limitations

Category 1 – When calculating reasonable potential, it appeared that the application data indicated that it was not being used in the analysis. The Department has reviewed this finding with permit writing staff and will work to ensure that all appropriate and available data is used in reasonable potential analysis calculations in future permit decisions.

Category 1 - The factsheet states that limitations within the permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Law and 40 C.F.R. Part 122.44; however, several effluent parameter limitations have changed or been eliminated without an explanation as to how they conform to the backsliding provision. The Department has revised the permit templates used by permit writers requiring that detailed justification for any less stringent requirement or limitation is needed in instances of allowable backsliding.

Monitoring and Reporting

Category 2 – The Department is making progress in permitting for water treatment plants (WTPs). The U.S. Environmental Protection Agency (EPA) urges a robust approach to setting Best Professional Judgment-based technology limits, and in consideration of water quality-based limits. The Department should assure that WTPs are submitting complete applications with representative monitoring. Reissued permits, even those accompanied by orders, should have



representative monitoring. The Department has reviewed this finding with permit writing staff and will work to ensure that representative monitoring is included in future WTP permits and applications and that applications for said permits are complete.

Nutrients

Category 2 – EPA views the adoption of numeric criteria as an important tool for effective water quality management of nutrient pollution. The Department needs to continue development of numeric criteria for nutrients for the state’s waters. The Department is preparing a rulemaking for lake nutrients at this time and encourages EPA’s permitting and standards staff to participate in the process to assist the state in developing future implementation of the promulgated nutrient criteria.

Pesticides

Category 3 – It suggests that in the reissued permit that the state addresses whether pesticide discharges to special waters (e.g., Outstanding Natural Resource Waters and impaired waters) are addressed differently than waters of the state. The reissued permit should also address discharges to endangered and threatened species and critical habitats and discharges near drinking water intake structures. The Department will address these more sensitive settings during the renewal of the pesticide applicator permit.

Pretreatment Permitting Activities

The following are comments on the pretreatment permitting findings identified in the integrated report.

Category 1 - Permits to implement pretreatment programs. It appears that the omission of the pretreatment program was an error, but the cities are currently implementing pretreatment program requirements regardless of the permit requirement. St. Peters and Farmington had new programs and the permits have been modified to include this requirement. Sullivan and Moberly permits are expired, so a modification of the permits will occur when the permits are renewed. National Pollutant Discharge Elimination System (NPDES) permits for Union, Wentzville, and Jefferson City will be modified to include the pretreatment program requirement as soon as practical.

A note to the Department’s electronic working file has been added to each NPDES permit file for active programs to remind the permit writer to include the special condition to implement the pretreatment program in the permit. This was completed earlier this year.

A note to the Department’s electronic file will also be added for cities with inactive programs to remind the permit writer to include the inactive status information in the factsheet. Reactivation will be triggered when the city reports that a new industry has located in the city pursuant to NPDES Permit Standard Conditions, Part II. The city’s pretreatment ordinance will be reviewed at that time and re-activation requirements will be communicated to the city. The NPDES permit may be reopened to incorporate a requirement to develop a pretreatment program if the current program is not sufficient.

Category 1 - Reevaluate local limits. A requirement to reevaluate local limits in accordance with 40 CFR 122.44(j)(2)(ii) has been added (since about May 2013) to the Special Condition inserted into permits for pretreatment program cities. The federal requirement is to “Provide a

written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1), following permit issuance or reissuance.” This language does not give a due date for the submission. Our permit language requires a submission along with the permit application. The evaluation can be done earlier to meet a compliance schedule, and the time limit is intended to require a submission by the end of the permit period. Alternate language can be considered to include both of these ideas.

Category 3 - Factsheets for POTWs in cities without a pretreatment program should state that a program is not required and describe discharging industries. The factsheets already have a paragraph on pretreatment and a check box to indicate whether a pretreatment is required or not. The permit application should contain a list of significant industrial users. We believe this is sufficient documentation.

Other Pretreatment Permitting Comments:

Standard Conditions Part II has a typographic error mentioned of Page 40 of EPA’s State Review Framework Report. The word “Special” will be replaced with the work “Standard” in the title of Standard Conditions Part II.

Concentrated Animal Feeding Operation (CAFO) Permitting Activities

The following are the responses and comments on CAFO permitting findings identified in the integrated report.

Background - Prior to January 28, 2013 NPDES permits, both individual and general (MOG01), were the only permit options available for CAFOs in Missouri. NPDES permits have allowances for a discharge from an uncovered liquid storage structure due to a catastrophic storm or chronic weather event as long as they have been operated and maintained according to permit requirements. Deep pit swine and dry litter poultry CAFOs that do not have uncovered liquid storage structures were also covered under the MOG01 permit and were not allowed to discharge.

Since all Class I (large) CAFOs in Missouri are required to be permitted whether they discharge or not, a state no-discharge permit (MOGS1) was developed and the master general permit template was issued on January 28, 2013 as a third permitting option. All CAFOs are required by state regulations to be designed, constructed, operated, and maintained as no-discharge. Each operation was allowed the opportunity to determine if they wanted to be covered by a NPDES permit or the MOGS1 permit based upon the type of manure handling system and management practices of the operation. During permit renewals in 2013, approximately 120 CAFOs with uncovered liquid storage structures, and all Class IB and smaller deep pit swine and dry litter poultry CAFOs opted for the MOGS1 permit. Without stricter state regulations, these operations that declared themselves as “no-discharge” would not be covered by a federal operating permit of any type and otherwise are unregulated.

The MOGS1 permit contains the same requirements as NPDES permits for land application area, manure transfers, mortality management, inspections, recordkeeping, nutrient management plans, and most requirements for annual reporting. The permit requirements for the production area are more stringent as there is no allowance for a discharge due to catastrophic storm or chronic weather event.

Category 1 - The Department's definition of process wastewater must be as stringent as the federal regulation at 40 CFR 122.23(b)(7). The definition must include water directly and indirectly used in the operation of a CAFO.

The definition of process wastewater in the current rule revisions (10 CSR 6.300) is preparing to change the language to read:

“Process wastewater—Water which carries or contains manure, including manure commingled with litter, compost, or other animal production waste materials used in the operation of the CAFO. Also includes water directly or indirectly used in the operation of the CAFO for any or all of the following: spillage or overflow from confined animal or poultry watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other CAFO facilities; and water resulting from the washing, or spray cooling of confined animals. Process wastewater also includes any water which comes into contact with any raw materials, products, or byproducts feed, milk, or eggs, or bedding.”

Category 1 – All uncontaminated storm water originating outside of the production area footprint should be diverted to prevent contact with manure, litter, or process wastewater as specified in CFR 40 §122.42 (e)(iii). Any process wastewater/storm water that comes in contact with these materials as specified in 40 CFR 122.23(b)(7) must be collected and disposed of in a manner that is consistent with the Clean Water Act. Authorization of discharges of process wastewater must be pursuant to a NPDES permit and constituent with the effluent limitation guidelines.

Diversion of clean water from the production area is required in 10 CSR 20-6.300(5)(C) as well as in the MOG01 and MOGS1 permits. In addition, CFR 40 §122.42(e) is incorporated in state regulations for NPDES permits in 10 CSR 20-6.300(3)(A)2 and into the MOG01 permit in Applicability 1. The requirement of ammonia testing in secondary containments is only included in individual NPDES permits. Most of these permits will be renewed in 2015 and the limitation of 2.5 for ammonia will be reviewed at that time.

Category 1 – Applications for CAFO operating permits must be completed. A complete and timely notice of intent indicates the owner or operator's intent to abide by all conditions of the permit and fulfills the requirements of a permit application.

The Nutrient Management Plan (NMP) portion (Parts 5-11) of Form W CAFO operating permit application is intended to be used as an option for operations for an export only NMP or to supplement the NMP that they have developed. If the operation has submitted a NMP that meets regulatory requirements, then these parts of the application are optional. A NMP is required with all NPDES permit applications and with all new MOGS1 permit applications.

The files for MOGS10174 AR Curtis were reviewed. The August 12, 2012 application did have Parts 5-11 completed. Part 8.1 asking if animals had contact with waters of the state was checked yes, but on the application for the 2011 renewal was checked no and stated that animals were confined to buildings. On July 31, 2014 Mr. Todd Curtis, owner, was contacted and stated he had misunderstood the question. Mr. Curtis confirmed that animals are confined to buildings at all times and do not have access to waters of the state.

The files for MOGS10423 Ponderosa LLC were reviewed. Parts 5 and 7–11 of the April 15, 2013 application were not completed. The operation did have a current NMP on file that was submitted as part of a December 12, 2012 construction permit application as required by 10 CSR 20-6.300. Since the NMP was submitted with the construction permit application and met regulatory requirements, it was not required with the operating permit application for renewal and modification.

The files for MOGS10428 Danny Bevill were reviewed. Part 8.1 asking if animals had contact with waters of the state was checked yes, but on the application for the 2011 renewal was checked no and stated that animal were confined to buildings. On July 31, 2014 Mr. Danny Bevill, owner, was contacted and stated he thought the question pertained to the public drinking water supply for the operation. Mr. Bevill confirmed that animals are confined to buildings at all times and do not have access to waters of the state.

Category 1 – The Wet Weather Management Guide (PUB2422) contains practices that minimize discharges from land application areas during wet weather events. Implementation of the Wet Weather Management Guide at CAFOs without an NPDES will not negate Clean Water Act liability. It should either be removed from the state permit or revised based on the no-discharge requirement.

The Wet Weather Management Practices guidance was revised earlier this year as part of the Departments' efforts to update all factsheets and guidance sheets. The revised version contains the following language, "While this guidance has provisions for land application practices that are not typically allowed, there shall be **no discharge** as a result of these applications from land application fields."

10 CSR 20-6.300(4)(A)4 describes Best Management Practices (BMPs) that must be followed in order for a discharge from a land application area under operational control of the CAFO owner to be considered an agricultural stormwater discharge. These BMPs include:

- Develop and implement a NMP;
- Minimize phosphorus and nitrogen transport from the field to surface waters in compliance with the Missouri Concentrated Animal Feeding Operations, Nutrient Management Technical Standard;
- Annual manure analysis and soil analysis every five years;
- Follow minimum land application setback distances; and
- Applications are conducted in a manner that prevents surface runoff.

If these BMP requirements are not met, a discharge resulting from a land application under any condition or permit coverage, does not meet the agricultural stormwater exemption.

Element 1 – Data; Finding 1-1: The Department did not batch any inspection or enforcement data into the Integrated Compliance Information System-National Pollutant Discharge Elimination (ICIS-NPDES) for FFY13, and does not consistently batch accurate Discharge Monitoring Report (DMR) data. EPA recommends: 1) The Department should continue to identify necessary data flows from MoCWIS to ICIS-NPDES to enable complete and accurate batching of DMR, compliance monitoring and enforcement data; 2) The Department should

begin to batch all elements to ICIS-NPDES by December 31, 2014, and 3) The Department should submit to EPA a timeline within 30 days after State Revolving Fund (SRF) finalization documenting actions to correct the batch upload issues, and report each quarter on progress.

The Department's Water Protection Program is currently working on two major enhancements, which are Batch 1 and Batch 2 & 3. The Department has determined that many of the permit data rejections from EPA's ICIS-NPDES database are associated with DMRs from permits that have been modified in the Department's MoCWIS database. The Batch 1 enhancement will change how Missouri submits permit modifications to ICIS, and resolve many of the data rejections. Discovering the root cause of these rejections, and a solution, took a considerable amount of time. Completion of this enhancement is currently under discussion with OECA. The Batch 2 & 3 project will address submitting compliance monitoring and enforcement data to ICIS. The Department has an active contract with a third-party software provider to accomplish this task. The Department had anticipated completion of this task in FFY 2014, but delays with the third-party provider and Department resource constraints has delayed completion of the project. It is anticipated that this project will be completed during FFY 2015.

Element 2 – Inspections; Finding 2-1: The Department completed inspection targets for NPDES program area in FFY 2013 with one exception, Major Combined Sewer Overflow inspections; Finding 2-2: The Department's inspection reports did not consistently identify pertinent facility information, compliance issues and compliance determinations. EPA recommends: 1) The Department revise their inspection report drafting process so basic information regarding the facility is captured, including correct permit numbers, facility address, description of facility and inspection date, 2) Define facility layout, process train and number outfalls in Core NPDES reports, 3) Define storm water BMPs in land disturbance reports, 4) Include aerial facility layouts with descriptions of notable features for all wastewater treatment plant and CAFO inspections, 5) Complete a CAFO inspection checklist for each CAFO inspection, and 6) Clearly document if unpermitted CAFOs are discharging manure, litter or process wastewater, and are subject to NPDES permitting regulations, and 7) Report to EPA each quarter the progress made to correct inspection report issues.

In response, the Department states that during review of EPA's comments the Department noticed that inspection staff occasionally coded compliance monitoring activities incorrectly in MoCWIS; this affected the sample that EPA reviewed. For instance, several of the CAFO reports were documenting spill investigations rather than scheduled compliance inspections. This could explain some of the "missing" elements documented during the review. Department staff use a CAFO inspection checklist when conducting compliance inspections, and includes the checklist with the inspection report. When conducting response to water pollution emergencies (e.g., a spill), staff do not use or attach a CAFO inspection checklist. Some of the inspection reports reviewed by EPA were associated with spills; therefore, the report did not include a checklist. Department staff use an automated reporting system to generate reports. The Department currently has an internal workgroup updating and standardizing the templates used by this system for all media (i.e., Water Pollution, Drinking Water, Air, Hazardous Waste, Solid Waste, etc.) Staff will ensure that the templates include these required items. The Department will provide staff with a memorandum reminding staff to include all required information in each inspection report and enter inspection data into MoCWIS properly. These items are expected to be completed by March 2015. In addition, the Department will provide EPA with a copy of the inspection memorandum noted above following its completion in March 2015.

Element 2 – Inspections; Finding 2-3: The Department files do not contain any information about how inspection checklist or field notes were retained. EPA recommends the Department revise their compliance manual to include details which clearly define how field notes are managed, and submit the Department's report to EPA forty-five days after receiving final SRF when note collection policy has been instituted.

The Department responds that field notes and checklists are generated during inspections and used to prepare the final inspection report. Once the inspection report is finalized, the field notes and checklists are destroyed. The checklists mimic the electronic database checklist, which is used to generate automated reports; therefore, once the data has been transferred from the checklist to the electronic database, there is no need to retain a paper copy of the checklist. Likewise, pertinent information contained in the inspection field notes is wholly incorporated in the final inspection report, which is retained in the Department's file for the facility; therefore, there is no need to retain paper copies of field notes. The Department will update the Operations Manual, by March 2015, to describe how field notes and checklists shall be managed. The Department will notify EPA following completion of revisions to the Operations Manual, which is expected to occur by March 2015.

Element 2 – Inspections; Finding 2-4: Inspection reports were not issued within thirty days, or ten days for land disturbance. EPA recommends the Department develop a standard operating plan (SOP) which will implement the timeline goals specified in the Operations Manual, and report to EPA on a quarterly basis the percentage of reports issued within specified timelines.

The Department will update the Operations Manual to provide an SOP for timelines for issuing inspection reports based on: 1) the type of inspection, 2) the severity of violations documented during the inspection and 3) the availability of sample results. The Department will strive to issue all inspection reports within thirty days from the date of inspection. If sample results are not received within this timeframe, the results can be sent under a separate cover letter upon availability. The Department will develop a report generated from MoCWIS, by March 2015, to ensure inspection reports are issued in a timely manner. This report can be used to provide EPA with quarterly updates until such time that the ICIS Batch 2 & 3 projects are complete.

Element 3 – Violations; Finding 3-1: Files reviewed showed the Department does not consistently or accurately identify single event violations as Significant Noncompliance (SNC) or non-SNC. EPA recommends: 1) Department staff should include a statement in its inspection reports, data system and official file identifying that the violations are SNC of state's regulations, 2) SNC determination should be entered into MoCWIS so that Department personnel can identify facilities which are out of compliance with environmental regulations, 3) The Department should create a plan of action which will result in SNC determinations made by inspectors, 4) SNC determinations should include single event violation codes that are entered into MoCWIS/ICIS, and 5) The Department should report to EPA on a quarterly basis the steps taken to complete SNC determinations.

Department inspectors are instructed to evaluate violations using guidance provided in the Compliance Manual to determine whether or not to issue a Letter or Warning (LOW) or Notice of Violation (NOV) to a facility. The follow-up response, or compliance monitoring action (i.e., issuing an LOW or NOV), is largely dependent upon the severity of the violation and/or the acute or chronic nature of the violation. Violations determined to be SNC are issued an NOV

unless the permittee has previously been informed of the violation and is taking reasonable action to resolve the violation. The Department will update the Compliance Manual and Operations Manual to require inspectors to specifically label SNC violations as SNC in inspection reports. These manual updates are expected to be completed by March 2015. The Department has a current data enhancement project to add a flag in the MoCWIS database to identify single event violations. This flag will be transmitted as a single event violation code to ICIS as part of the data batch projects discussed in the state's response to Finding 1-1. This enhancement is expected to be completed during FFY 2015. Additionally, Department staff can currently generate a report from MoCWIS to identify facilities that have been issued LOWs and NOVs; therefore, staff can identify facilities that are out of compliance using data already managed by MoCWIS. Once the MoCWIS enhancement discussed immediately above is complete, staff will have the capability to generate a report from MoCWIS that identifies all facilities having violations with single event violation flags. The Department will notify EPA following completion of the manual updates discussed above and single event violation enhancement in MoCWIS is complete.

Element 3 – Violations; Finding 3-2: Department pretreatment compliance inspections did not consistently identify and determine the compliance of the inspected facility. Department staff appears to need additional experience and/or training in pretreatment regulations as applied by approved pretreatment programs. EPA recommends the Department report quarterly on the steps taken to increase inspector's knowledge of pretreatment regulations such as trainings, presentations, participating in joint inspections with EPA or other methods. EPA suggests we work to create a capacity building schedule to create achievement milestones, such as training accomplished in 3 months, ten joint inspections in FY2015.

The Department held a training session on pretreatment regulations and inspections, including a discussion on determining SNC, during the 2014 Clean Water Regional Office/Central Office Coordination meeting on August 19-21, 2014. Department staff are currently drafting language for the Operations Manual that will provide guidance to inspectors on conducting and writing inspection reports for pretreatment inspections. This guidance is expected to be completed by March 2015. Department staff would be interested in participating in joint inspections with EPA. The Department will notify EPA following finalization of this guidance document. Additionally, the Department would be interested in hosting a training event if EPA would be interested in providing pretreatment training. The Department is agreeable to discussing a capacity building schedule with EPA, and this could be developed for FY 2016 since the FY 2015 inspections have already been scheduled.

Element 4 – Enforcement; Finding 4-1: The Department's informal and formal actions do not always bring a facility back into compliance. EPA recommends the Department: 1) escalate its enforcement response if a facility is not coming into compliance (11 of the 12 informal enforcement actions that did not result in a return to compliance or escalated enforcement were sent to the same facility, Great Western Motel.), 2) submit to EPA a statement about how the escalation timeline is either appropriate or inappropriate, and 3) should review their escalation policy by December 31, 2014.

The Department's escalation policy is provided in the Compliance Manual, and staff are familiar with this guidance. On Great Western Hotel, the enforcement actions taken were LOWs for failure to submit complete, accurate or timely DMRs. Following several unsuccessful attempts

through conference, conciliation and persuasion (i.e., CC&P, which is required by state statute), the matter was referred to the Water Protection Program's Compliance and Enforcement Section in March 2013. Following unsuccessful attempts to resolve violations at the enforcement level, the matter was referred to the Attorney General's Office in June 2014.) The Department feels that the escalation policy outlined in the Compliance Manual is appropriate. The Compliance Manual provides guidance on when to issue LOWs and NOVs, and when to refer the matter to the Compliance and Enforcement Section or the Attorney General's Office. The Compliance Manual also allows for some discretion regarding escalating enforcement due to case-specific circumstances, e.g., if the facility has already initiated corrective actions that will resolve violations in a reasonable timeframe.

In general, though, the escalation policy is as follows:

1. First violation – LOW.
2. Second occurrence of violation – NOV.
3. Third occurrence of violation, or unsuccessful attempts to resolve the violations through CC&P within 90-180 days – Enforcement Action Request.
4. Unsuccessful attempts to resolve the violations through an out-of court agreement - Referral to the Attorney General's Office.

The Department will draft a memorandum to regional office staff to remind them of the escalation policy outlined in the Compliance Manual.

Element 4 – Enforcement; Finding 4-2: The AGO appears to slow the process of concluding environmental cases. EPA recommends the Department submit a quarterly report to EPA discussing the actions taken to address timeliness at the AGO, and the Department and AGO submit a work plan that includes information on enforcement timelines and steps taken to address delays.

Cases in litigation do not lend themselves to quick resolution (i.e., less than a year or two from referral to execution of a legal resolution). AGO has experienced an increase in case load as well as a reduction in staff over recent years, which has affected resolution timeframes, but the AGO feels that the amount of time spent negotiating settlement and litigating matters has been appropriate. The Department will request that the AGO develop a work plan that outlines timeframes for milestones and resolution goals for referred cases.

Element 5 – Penalties; Finding 5-1: The Department's initial penalty calculations include gravity; however, economic benefit is not considered by the state. This is a repeat finding from the EPA SRF review from FFY 2009. EPA recommends the Department amend the penalty matrix worksheets to include a discussion of economic benefit. In FFY 2015, EPA will review the amended penalty matrix worksheets to determine if economic benefit is being considered by the Department. EPA recommends the Department submit a report to EPA on quarterly basis of steps taken to address economic benefit considerations when calculating penalty actions.

The Department has amended and implemented the penalty matrix worksheet to expand the discussion on and consideration of economic benefit. The revisions are based upon 10 CSR 20-3.010(3)(D). Economic benefit including delayed and avoided costs added to the penalty. Determination made by the Department using an economic benefit formula that provides

reasonable estimate of the economic benefit. Economic benefit may be excluded if one of the following occurs:

1. Economic benefit is insignificant;
2. Compelling public concerns that would not be served by taking the case through administrative appeal or circuit court litigation; or
3. Unlikely Department would be able to recover economic benefit based in litigation based on the particular case.

Note: The Department completed this task prior to finalization of the SRF response.

Element 5 – Penalties; Finding 5-2: The Department's documentation for penalty actions do not document the difference between proposed and final penalty assessed penalties. EPA recommends the Department: 1) ensure that the issued penalty matches to calculated penalty, and if penalty differs, the Department should amend the office file to describe penalty difference, and 2) report to EPA on a quarterly basis the number of penalties that were issued at a different number than the calculated amount and that the official file has been updated to reflect the change.

The Department does not routinely issue penalties through unilateral orders; rather, the Department calculates a civil penalty based on the violations documented and negotiates the penalty amount paid. The negotiated penalty amount is included in a negotiated agreement. Department enforcement files contain correspondence between the Department and the responsible party documenting any reduction in the penalty calculated. The Department developed and implemented a new process for enforcement staff to document reductions in penalty amounts through negotiations. Negotiation discussions between the case manager, unit chief and section chief are documented in a memorandum-to-file each time a penalty offer deviates from the originally calculated and approved penalty. The Department initiated the reporting protocol prior to finalization of the SRF response.

Element 5 – Penalties; Finding 5-3: Department documentation consistently documented the penalty payment information. EPA noted the Department meets or exceeds these expectations. No response is needed.

Thank you for the opportunity to review the findings of the permitting and enforcement program reviews. We trust these comments are helpful. If there are any questions, please contact me at Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri or (573) 751-6721.

Sincerely,

WATER PROTECTION PROGRAM



John Madras
Director

JM/lsm

STATE REVIEW FRAMEWORK

Missouri

Resource Conservation and Recovery Act Implementation in Federal Fiscal Year 2014

**U.S. Environmental Protection Agency
Region 7, Kansas City**

**Final Report
July 22, 2016**

Executive Summary

Introduction

EPA Region 7 enforcement staff conducted a State Review Framework (SRF) enforcement program oversight review of the Missouri Department of Natural Resources, Hazardous Waste Program, Compliance and Enforcement Section.

EPA bases SRF findings on data and file review metrics, and conversations with program management and staff. EPA will track recommended actions from the review in the SRF Tracker and publish reports and recommendations on EPA's ECHO web site.

Significant changes to the State hazardous waste program regulations, effective January 1, 2016, will create a heavy resource demand on inspection and enforcement staff as many of the existing state public guidance documents, policies, checklists, fact sheets and other technical documents will require revision. It is likely that the regulated community will require additional compliance assistance as the new regulations are effective, placing additional burden on staff.

Areas of Strong Performance

- The MDNR is effective at identifying violations of the hazardous waste program.
- The MDNR operates an effective program to address violations and return facilities to compliance with the regulatory requirements.
- The MDNR issues timely formal enforcement in most cases, where the facility is identified as a significant non-complier.

Most Significant RCRA Subtitle C Program Issues¹

- Finding 1-1: The MDNR did not enter all mandatory data for inspection and enforcement activities.

¹ EPA's "National Strategy for Improving Oversight of State Enforcement Performance" identifies the following as significant recurrent issues: "Widespread and persistent data inaccuracy and incompleteness, which make it hard to identify when serious problems exist or to track state actions; routine failure of states to identify and report significant noncompliance; routine failure of states to take timely or appropriate enforcement actions to return violating facilities to compliance, potentially allowing pollution to continue unabated; failure of states to take appropriate penalty actions, which results in ineffective deterrence for noncompliance and an unlevel playing field for companies that do comply; use of enforcement orders to circumvent standards or to extend permits without appropriate notice and comment; and failure to inspect and enforce in some regulated sectors."

- Finding 2-2: The inspection reports reviewed often did not contain enough detail to determine compliance. Consistent report content, documentation, and format are under development by Regional and Central office staff and management at this time.
- Finding 3-1: The MDNR is not consistently identifying facilities as SNC in the national database, however, this did not result in the failure to take formal enforcement.
- Finding 5-2: The program files did not consistently include documentation of penalty reduction in those formal enforcement cases where the civil penalty was settled for less than the originally assessed penalty.

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I. Background on the State Review Framework

The State Review Framework (SRF) is designed to ensure that EPA conducts nationally consistent oversight. It reviews the following local, state, and EPA compliance and enforcement programs:

- Clean Water Act National Pollutant Discharge Elimination System
- Clean Air Act Stationary Sources (Title V)
- Resource Conservation and Recovery Act Subtitle C

Reviews cover:

- **Data** — completeness, accuracy, and timeliness of data entry into national data systems
- **Inspections** — meeting inspection and coverage commitments, inspection report quality, and report timeliness
- **Violations** — identification of violations, determination of significant noncompliance (SNC) for the CWA and RCRA programs and high priority violators (HPV) for the CAA program, and accuracy of compliance determinations
- **Enforcement** — timeliness and appropriateness, returning facilities to compliance
- **Penalties** — calculation including gravity and economic benefit components, assessment, and collection

EPA conducts SRF reviews in three phases:

- Analyzing information from the national data systems in the form of data metrics
- Reviewing facility files and compiling file metrics
- Development of findings and recommendations

EPA builds consultation into the SRF to ensure that EPA and the state understand the causes of issues and agree, to the degree possible, on actions needed to address them. SRF reports capture the agreements developed during the review process in order to facilitate program improvements. EPA also uses the information in the reports to develop a better understanding of enforcement and compliance nationwide, and to identify issues that require a national response.

Reports provide factual information. They do not include determinations of overall program adequacy, nor are they used to compare or rank state programs.

Each state's programs are reviewed once every five years. The first round of SRF reviews began in FY 2004. The third round of reviews began in FY 2013 and will continue through FY 2017.

II. SRF Review Process

Review period: FFY2014

Key dates:

Data metric analysis and file selection list sent to MDNR: July 27, 2015
On-site file review conducted: August 18 – 20 and September 8 – 10, 2015
Draft report sent to headquarters: October 15, 2015
Draft report sent to MDNR: November 18, 2015
Final report issued: July 22, 2016

State and EPA key contacts for review:

EPA Region 7 SRF Coordinator: Kevin Barthol
EPA Region 7 Missouri RCRA Coordinator: Beth Koesterer
EPA Region 7 Reviewers: Deborah Bredehoff and Liz Blackburn
MDNR/HWP Compliance and Enforcement Section Chief: Kathy Flippin
MDNR/HWP Compliance and Enforcement Unit Chief: Nicole Eby

III. SRF Findings

Findings represent EPA’s conclusions regarding state performance and are based on findings made during the data and/or file reviews and may also be informed by:

- Annual data metric reviews conducted since the state’s last SRF review
- Follow-up conversations with state agency personnel
- Review of previous SRF reports, Memoranda of Agreement, or other data sources
- Additional information collected to determine an issue’s severity and root causes

There are three categories of findings:

Meets or Exceeds Expectations: The SRF was established to define a base level or floor for enforcement program performance. This rating describes a situation where the base level is met and no performance deficiency is identified, or a state performs above national program expectations.

Area for State Attention: An activity, process, or policy that one or more SRF metrics show as a minor problem. Where appropriate, the state should correct the issue without additional EPA oversight. EPA may make recommendations to improve performance, but it will not monitor these recommendations for completion between SRF reviews. These areas are not highlighted as significant in an executive summary.

Area for State Improvement: An activity, process, or policy that one or more SRF metrics show as a significant problem that the agency is required to address. Recommendations should address root causes. These recommendations must have well-defined timelines and milestones for completion, and EPA will monitor them for completion between SRF reviews in the SRF Tracker.

Whenever a metric indicates a major performance issue, EPA will write up a finding of Area for State Improvement, regardless of other metric values pertaining to a particular element.

The relevant SRF metrics are listed within each finding. The following information is provided for each metric:

- **Metric ID Number and Description:** The metric’s SRF identification number and a description of what the metric measures.
- **Natl Goal:** The national goal, if applicable, of the metric, or the CMS commitment that the state has made.
- **Natl Avg:** The national average across all states, territories, and the District of Columbia.
- **State N:** For metrics expressed as percentages, the numerator.
- **State D:** The denominator.
- **State % or #:** The percentage, or if the metric is expressed as a whole number, the count.

Resource Conservation and Recovery Act Findings

RCRA Element 1 — Data						
Finding 1-1	Area for State Improvement					
Summary	MDNR did not enter all mandatory data for inspection and enforcement activities. This was noted as an area for state improvement in the Round 2 program review.					
Explanation	Of the 25 facility files reviewed, 10 were noted as having some data missing when comparing the file information to RCRAInfo data. Seven facilities were missing SNC determinations, however, the appropriate formal enforcement action was taken in each case. Penalty information was missing for one formal enforcement action; return to compliance data was missing or erroneous for four facilities; one follow-up inspection was not entered. Other data errors were minor.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	2b Complete and accurate entry of mandatory data	100%		15	25	60%
	2a Long-standing secondary violators					42
State response	MDNR agrees with the recommendation that it would be helpful for EPA and MDNR to discuss the status of current and pending enforcement cases during monthly enforcement coordination conference calls to ensure all significant non-complier evaluations and associated data are recorded. We are currently having these discussions during regularly scheduled calls. Also, as EPA suggested, the Hazardous Waste Program (HWP) has by March 31, 2016, reviewed and revised the 2010 SOP for identifying SNCs and HPVs, and has reviewed these procedures with inspection and enforcement staff and management.					
Recommendation	EPA and MDNR will discuss the status of current and pending enforcement cases during monthly enforcement coordination conference calls to ensure all SNC evaluations and associated data are recorded. By March 31, 2016, HWP will review and revise, if necessary, the 2010 SOP for identifying SNCs and HPVs, and review these procedures with inspection and enforcement staff and management.					

RCRA Element 2 — Inspections

Finding 2-1	Area for State Attention																																										
<p>Summary</p>	<p>MDNR inspected less than the expected number of operating TSDFs in the two-year inspection cycle. The LQG inspection coverage over the five-year inspection coverage cycle is less than expected, however, the annual inspection coverage meets the national goal.</p>																																										
<p>Explanation</p>	<p>MDNR’s ability to complete the required number of LQG and TSDF inspections has been impacted by staffing turnover, the need to follow-up on citizen complaints, and state-specific requirements for quarterly inspections at commercial TSDFs. When planning inspections, EPA and MDNR coordinate efforts in order to maximize inspection resources. If the EPA inspections at the TSDFs and LQGs are included in the percentages below, the universe coverage is a bit closer to the national goal than for the State’s numbers alone. Two facilities in the operating TSDF universe that operate units under Remedial Action Plans should be evaluated for proper operating and legal status codes. This could affect the two-year coverage percentages of metric 5a.</p> <p>In the future, inspection coordination between EPA and MDNR will include a review of the inspection status of the operating TSDF and LQG facilities in the State, to evaluate which of these facilities should be included in any given inspection schedule.</p> <p>MDNR spends quite a bit of its resources to inspect small quantity and conditionally exempt generators, and sources of citizen complaints. These facilities have resulted in a majority of the formal enforcement actions for the MDNR in the past.</p> <p>Note: MDNR does not have an alternative CMS plan for inspection of other generators in lieu of LQGs.</p>																																										
<p>Relevant metrics</p>	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>5a Two-year inspection coverage of operating TSDFs</td> <td>100%</td> <td>88.40%</td> <td>15</td> <td>20</td> <td>75%</td> </tr> <tr> <td>5b Annual inspection coverage of LQGs</td> <td>20%</td> <td>20.10%</td> <td>59</td> <td>287</td> <td>20.60%</td> </tr> <tr> <td>5c Five-year inspection coverage of LQGs</td> <td>100%</td> <td>67.10%</td> <td>199</td> <td>287</td> <td>69.30%</td> </tr> <tr> <td>5d Five-year inspection coverage of active SQGs</td> <td></td> <td>10.60%</td> <td>832</td> <td>2009</td> <td>41.40%</td> </tr> <tr> <td>5e1 Five-year inspection coverage of active conditionally exempt SQGs</td> <td></td> <td></td> <td></td> <td></td> <td>568</td> </tr> <tr> <td>5e2 Five-year inspection coverage of active transporters</td> <td></td> <td></td> <td></td> <td></td> <td>17</td> </tr> </tbody> </table>	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	5a Two-year inspection coverage of operating TSDFs	100%	88.40%	15	20	75%	5b Annual inspection coverage of LQGs	20%	20.10%	59	287	20.60%	5c Five-year inspection coverage of LQGs	100%	67.10%	199	287	69.30%	5d Five-year inspection coverage of active SQGs		10.60%	832	2009	41.40%	5e1 Five-year inspection coverage of active conditionally exempt SQGs					568	5e2 Five-year inspection coverage of active transporters					17
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	5e3 Five-year inspection coverage of active non-notifiers		7
	5e4 Five-year inspection coverage of active sites not covered by metrics 2c through 2f3		607
State response	<p>MDNR agrees that it is appropriate to review the inspection status of the state's operating TSDFs and LQG facilities with EPA to evaluate which of the facilities should be included in any inspection schedule. For many years we have queried our database to choose appropriate inspection candidates and to meet the required inspection cycles. We base our inspection choices for TSDFs based on the state's regulations regarding commercial TSDFs (that we inspect more frequently than once per year), and our knowledge of the activities and status of the state's non-commercial TSDFs. We also base our selection of LQGs on the state's handler database. We recognize that in some cases, this may not match the status or other information facilities note in biennial reports. In addition, the databases do not reveal why a facility may not be the most appropriate inspection candidate at the time. EPA notes that the two facilities in the operating TSDF universe that operate units under Remedial Action Plans should be evaluated for proper operating and legal status codes. We welcome a discussion with EPA during our monthly conference calls about these sites that appear to be operating under Remedial Action Plans issued by EPA. We understand that resolving this will likely increase the two-year coverage percentages of metric 5a (two-year inspection coverage of operating TSDFs).</p>		
Recommendation			

RCRA Element 2 — Inspections

Finding 2-2	Area for State Improvement																							
Summary	Inspection reports often lacked sufficient detail and documentation to determine compliance status of the facility. The reports are not dated upon completion.																							
Explanation	<p>According to the SRF evaluation criteria, the inspection report should include a narrative discussion that explains the overall nature of the facility’s activities, the manufacturing and waste management practices, the generation and handling of wastes, describes the apparent violations and the documentation supporting the determination that the violation exists. All necessary documentation to provide evidence of the violations should also be attached to the inspection report.</p> <p>Many of the inspection reports lacked some information necessary to determine compliance status. This information included a description of the facility’s overall operations and waste management activities, verification of the generator status of the facility, citing specific violations noted on the attached checklists, missing checklists, and no inspection report correlating to the inspection recorded in RCRAInfo. The inspection reports are signed by the inspector, but the inspector does not date the report upon completion. Therefore, the timeliness of report completion was calculated based upon the date that the report was sent to the facility. MDNR’s internal policy is to have the reports completed within 30 days of the inspection.</p>																							
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>6a Inspection reports complete and sufficient to determine compliance</td> <td>100%</td> <td></td> <td>11</td> <td>25</td> <td>44%</td> </tr> <tr> <td>6b Timeliness of inspection report completion</td> <td>100%</td> <td></td> <td>10</td> <td>25</td> <td>40%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	6a Inspection reports complete and sufficient to determine compliance	100%		11	25	44%	6b Timeliness of inspection report completion	100%		10	25	40%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
6a Inspection reports complete and sufficient to determine compliance	100%		11	25	44%																			
6b Timeliness of inspection report completion	100%		10	25	40%																			
State response	<p>In its recommendation, EPA acknowledged that MDNR is in the process of implementing a template format for its hazardous waste inspection reports, and the first draft of the template was provided to staff in July 2015. EPA noted that the format should lend some consistency to the type and amount of information to be included in inspection reports. We appreciate EPA's Region 7's responsiveness to our request in 2015 to provide training to hazardous waste inspectors on the expectations for documenting detail on observations and evidence of violations in inspection reports. In addition, as recommended, MDNR agrees that program managers should evaluate the use of the template after a period of use to determine its effectiveness in addressing the issue so that EPA can determine if this finding can be closed.</p>																							

Recommendation

MDNR is in the process of implementing a template format for its hazardous waste inspection reports. The first draft of the template was introduced to staff in July 2015. The template includes a description of facility operations, and a signature and date block at the end of the report. This format should lend some consistency to the type and amount of information that is included in the inspection reports. EPA recommends that the use of the template be evaluated by MDNR's management after a period of use, to determine its effectiveness in addressing this issue, and discuss the results of this evaluation with EPA. EPA will then determine if this Finding can be closed.

RCRA Element 3 — Violations

Finding 3-1	Area for State Improvement						
Summary	In some instances, violations noted in the inspection report or its attachments (checklists) were not included in the report or enforcement follow-up. Some SNC determinations were not established in RCRAInfo with an SNY evaluation, however, with one exception, this did not prevent the appropriate enforcement action from being taken.						
Explanation	<p>In reviewing the inspection reports for five of the facilities, violations were noted on checklists attached to the inspection reports or within the narrative of the report, but these violations were not brought forward in the enforcement follow-up (notice of violation, letter of warning), or otherwise made known to the facility or recorded in RCRAInfo. In one instance, a facility was noted to generate universal waste, but there was no indication in the inspection report that the inspection included an evaluation of universal waste requirements.</p> <p>There were seven facilities that either received formal enforcement or were in the process of formal enforcement, but had not been designated as SNC. However, the review found two additional facilities that could have been considered SNC; one due to substantial deviation from the regulatory requirements, and the other based on substantial likelihood of exposure from illegal disposal if the case had been developed further.</p>						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	7a Accurate compliance determinations		100%		17	23	73.9%
	8c Appropriate SNC determinations		100%		14	23	60.9%
	8a SNC identification rate			2%	4	439	0.90%
State response	<p>As noted in our first comment above, an updated inspection report format and additional monthly communications on new and existing cases can help determine if and when SNCs are identified to help address this comment. Since this review, EPA staff responded to our staffs request to provide additional training to state program and regional staff on the importance of documenting and taking appropriate action on violations. Also since this review, department workgroups have been meeting to formalize the violation identification process and the steps and timeframes for action to be taken when "serious and significant" violations are identified. Processes are being clearly identified for staff, incorporated into training and in a consolidated manual for staffs use. These actions plus use of the inspection template and updated inspection checklists should help ensure that all violations are documented, significant violations are documented in NOV's</p>						

	and SNCs are recognized so that appropriate enforcement action can be taken.
Recommendation	<p>The use of the inspection template referenced in Finding 2-2 should help the inspection staff to ensure that all violations noted in the inspection and associated checklists are brought forward for enforcement follow-up and return to compliance. The template format includes specific sections for observations, violations, and recommendations for return to compliance. The recommendations of Finding 2-2 apply to this Finding as well.</p> <p>With regard to SNC determinations, the Regional and Central offices should communicate more regularly regarding facilities that are found to be substantially out of compliance with the regulations. Facilities that meet the definition of SNC should be referred for enforcement without delay. The recommendation of monthly conference call discussions of Finding 1-1 apply for this Finding as well.</p>

RCRA Element 3 — Violations

Finding 3-2	Meets or Exceeds Expectations					
Summary	MDNR exceeds the national average at identifying violations at inspections. When SNC is identified in the national database, it is done so in a timely manner.					
Explanation	None necessary.					
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D % or #
	7b Violations found during inspections			36.7%		49.9%
	8b Timeliness of SNC determinations		100%	85.2%		100%
State response	MDNR appreciates EPA's acknowledgement of the state's work in identifying violations during inspections and timely entry of SN Cs in the national database.					
Recommendation						

RCRA Element 4 — Enforcement

Finding 4-1	Meets or Exceeds Expectations						
Summary	MDNR’s enforcement response to violations is timely and appropriate. It is effective at returning the facility to compliance with the regulatory requirements.						
Explanation	In all instances reviewed where enforcement actions were taken, the actions taken were adequate to return the facility to compliance. MDNR is very close to the National Goal with regard to timely enforcement at significant non-compliers. In one instance, the facility had a significant number of violations cited during the inspection and could have been considered a SNC. However, informal enforcement returned the facility to compliance within a short period of time.						
Relevant metrics	Metric ID Number and Description		Natl Goal	Natl Avg	State N	State D	State % or #
	9a Enforcement that returns violators to compliance		100%		17	17	100%
	10a Timely enforcement taken to address SNC		80.0%	84.3%	3	4	75.0%
	10b Appropriate enforcement taken to address violations		100%		15	16	93.8%
State response	MDNR also appreciates EPA's acknowledgement that we meet or exceed expectations in this area. We will continue our efforts to take appropriate actions to return facilities to compliance and remain close to or attempt to exceed the national goal in regard to timely enforcement at significant non-compliers.						
Recommendation							

RCRA Element 5 — Penalties

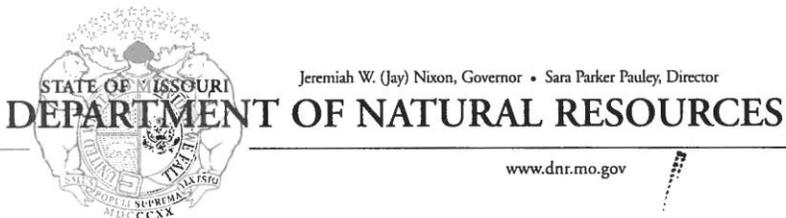
Finding 5-1	Area for State Attention																							
Summary	MDNR is following its policies and guidance for assessing and collecting penalties. A standard format is used for penalty calculations within the HWP.																							
Explanation	<p>The HWP has developed a standard format for penalty calculation, justification and an associated penalty matrix. Evidence of its consistent use for calculating gravity-based penalties was found in the files reviewed. The calculation of economic benefit for non-compliance (EBN) was calculated for most of the penalty cases. One case did not include any EBN component, and another discussed EBN but did not include it for all violations where appropriate.</p> <p>One file was missing documentation of penalty collection. The HWP coordinates with the DEQ Finance Department to provide documentation of penalty payment for the program files, thereby prompting a memo to close out the enforcement case if all other actions under the Settlement Agreement or Order have been completed. Considerable progress has been made by the HWP in the program area of penalty calculation, assessment, collection and documentation. Continued use of the HWP standard format should be promoted by MDNR management.</p>																							
Relevant metrics	<table border="1"> <thead> <tr> <th>Metric ID Number and Description</th> <th>Natl Goal</th> <th>Natl Avg</th> <th>State N</th> <th>State D</th> <th>State % or #</th> </tr> </thead> <tbody> <tr> <td>11a Penalty calculations include gravity and economic benefit</td> <td>100%</td> <td></td> <td>6</td> <td>8</td> <td>75.0%</td> </tr> <tr> <td>12b Penalties collected</td> <td>100%</td> <td></td> <td>6</td> <td>7</td> <td>85.7%</td> </tr> </tbody> </table>						Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #	11a Penalty calculations include gravity and economic benefit	100%		6	8	75.0%	12b Penalties collected	100%		6	7	85.7%
Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #																			
11a Penalty calculations include gravity and economic benefit	100%		6	8	75.0%																			
12b Penalties collected	100%		6	7	85.7%																			
State response	<p>State staff continue to use the RCRA Civil Penalty Policy as a basis for calculating penalties and the Administrative Penalty regulations that are patterned after the gravity-based federal penalty policy. We acknowledge EPA's comments in the explanation for this element that one case did not include an economic benefit component and another discussed it but did not include it for all violations. The explanation also notes that one file was missing documentation of penalty collection. We will discuss findings with EPA staff during our monthly calls. We appreciate EPA's comment that considerable progress has been made by the HWP in the program area of penalty calculation, assessment, collection and documentation.</p>																							
Recommendation																								

RCRA Element 5 — Penalties

Finding 5-2	Area for State Improvement					
Summary	The documentation of the difference between the initial and final penalty is not consistently documented in the program files.					
Explanation	The facility files reviewed included four formal enforcement cases that were settled for less than the initial assessed penalty. Only one of the files included documentation of the rationale for the reduction in the penalty, as arrived at during the course of negotiations. This was discussed during the program review with HWP staff, and is recognized as necessary documentation for the program files.					
Relevant metrics	Metric ID Number and Description	Natl Goal	Natl Avg	State N	State D	State % or #
	12a Documentation on difference between initial and final penalty	100%		1	4	25.0%
State response	EPA recommends that HWP revise its standard penalty calculation and documentation format to include a specific section for penalty reduction justification to ensure that this information is consistently documented. EPA further requested that MDNR submit a revised penalty sheet for EPA review within 90 days of the final report date which it will use to close this finding. The program agrees to provide a format for documenting penalty close-out decisions within the timeframe requested.					
Recommendation	EPA recommends that HWP revise the standard penalty calculation and documentation format, to include a specific section for penalty reduction justification to ensure that this information is consistently documented. Please submit a revised penalty sheet for EPA review within 90 days of the final report date, which will close this Finding.					

Appendix

MDNR Hazardous Waste Program Response Letter



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

APR 29 2016

Mr. Donald Toensing, Chief
Waste Enforcement and Materials Management Branch
Air and Waste Management Division
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, KS 66219

AWMD / WEMM
MAY 03 2016
RECEIVED

Dear Mr. Toensing:

Our office has received and reviewed the Environmental Protection Agency's (EPA) draft report of the State Review Framework (SRF) for the Missouri Department of Natural Resources (MDNR), Resource Conservation and Recovery Act Enforcement Program. The review focused on activities conducted in 2014. We apologize for the delay in responding as staff have been heavily engaged in rule changes and retraining related to implementing Missouri's new "no stricter than federal" regulations on the effective date of December 30, 2015.

The state is providing comments after each element as requested.

RCRA Element 1 – Data – Area for State Improvement

Summary – EPA states that MDNR did not enter all mandatory data for inspection and enforcement activities. This was noted as an area for state improvement in the Round 2 program review.

State response – MDNR agrees with the recommendation that it would be helpful for EPA and MDNR to discuss the status of current and pending enforcement cases during monthly enforcement coordination conference calls to ensure all significant non-complier evaluations and associated data are recorded. We are currently having these discussions during regularly scheduled calls. Also, as EPA suggested, the Hazardous Waste Program (HWP) has by March 31, 2016, reviewed and revised the 2010 SOP for identifying SNCs and HPVs, and has reviewed these procedures with inspection and enforcement staff and management.



RCRA Element 2 – Inspections – Area for State Attention

Summary – EPA states that MDNR inspected less than the expected number of operating TSDFs in the two-year inspection cycle. The LQG inspection coverage of the five-year inspection coverage cycle is less than expected; however, the annual inspection coverage meets the national goal.

State response – MDNR agrees that it is appropriate to review the inspection status of the state’s operating TSDFs and LQG facilities with EPA to evaluate which of the facilities should be included in any inspection schedule. For many years we have queried our database to choose appropriate inspection candidates and to meet the required inspection cycles. We base our inspection choices for TSDFs based on the state’s regulations regarding commercial TSDFs (that we inspect more frequently than once per year), and our knowledge of the activities and status of the state’s non-commercial TSDFs. We also base our selection of LQGs on the state’s handler database. We recognize that in some cases, this may not match the status or other information facilities note in biennial reports. In addition, the databases do not reveal why a facility may not be the most appropriate inspection candidate at the time. EPA notes that the two facilities in the operating TSDF universe that operate units under Remedial Action Plans should be evaluated for proper operating and legal status codes. We welcome a discussion with EPA during our monthly conference calls about these sites that appear to be operating under Remedial Action Plans issued by EPA. We understand that resolving this will likely increase the two-year coverage percentages of metric 5a (two-year inspection coverage of operating TSDFs).

RCRA Element 2 – Inspections – Area for State Improvement

Summary – EPA noted that inspection reports often lacked sufficient detail and documentation to determine compliance status of the facility. The reports are not dated upon completion (i.e., therefore the reviewer based timeliness on the date the report was sent to the facility).

State response – In its recommendation, EPA acknowledged that MDNR is in the process of implementing a template format for its hazardous waste inspection reports, and the first draft of the template was provided to staff in July 2015. EPA noted that the format should lend some consistency to the type and amount of information to be included in inspection reports. We appreciate EPA’s Region 7’s responsiveness to our request in 2015 to provide training to hazardous waste inspectors on the expectations for documenting detail on observations and evidence of violations in inspection reports. In addition, as recommended, MDNR agrees that program managers should evaluate the use of the template after a period of use to determine its effectiveness in addressing the issue so that EPA can determine if this finding can be closed.

RCRA Element 3 – Violations – Area for State Improvement

Summary – EPA stated in its report that in some instances, violations noted in the inspection report or its attachments (checklists) were not included in the report or enforcement follow-up.

Mr. Donald Toensing
Page Three

Some SNC determinations were not established in RCRAInfo with an SNY evaluation; however, with one exception, this did not prevent the appropriate enforcement action from being taken.

State response – As noted in our first comment above, an updated inspection report format and additional monthly communications on new and existing cases can help determine if and when SNCs are identified to help address this comment. Since this review, EPA staff responded to our staff's request to provide additional training to state program and regional staff on the importance of documenting and taking appropriate action on violations. Also since this review, department workgroups have been meeting to formalize the violation identification process and the steps and timeframes for action to be taken when “serious and significant” violations are identified. Processes are being clearly identified for staff, incorporated into training and in a consolidated manual for staff's use. These actions plus use of the inspection template and updated inspection checklists should help ensure that all violations are documented, significant violations are documented in NOV's and SNCs are recognized so that appropriate enforcement action can be taken.

RCRA Element 3 – Violations – Meets or Exceeds Expectations

Summary – EPA acknowledged that MNDR exceeds the national average at identifying violations at inspections. When SNC is identified in the national database, it is done so in a timely manner.

State response – MDNR appreciates EPA's acknowledgement of the state's work in identifying violations during inspections and timely entry of SNCs in the national database.

RCRA Element 4 – Enforcement – Meets or Exceeds Expectations

Summary – EPA stated that MDNR's enforcement response to violations is timely and appropriate. It is effective at returning the facility to compliance with the regulatory requirements.

State response – MDNR also appreciates EPA's acknowledgement that we meet or exceed expectations in this area. We will continue our efforts to take appropriate actions to return facilities to compliance and remain close to or attempt to exceed the national goal in regard to timely enforcement at significant non-compliers.

RCRA Element 5- Penalties – Area for State Attention

Summary – EPA noted that MDNR is following its policies and guidance for assessing and collecting penalties. A standard format is used for penalty calculations within the HWP.

Mr. Donald Toensing
Page Four

State response – State staff continue to use the RCRA Civil Penalty Policy as a basis for calculating penalties and the Administrative Penalty regulations that are patterned after the gravity-based federal penalty policy. We acknowledge EPA’s comments in the explanation for this element that one case did not include an economic benefit component and another discussed it but did not include it for all violations. The explanation also notes that one file was missing documentation of penalty collection. We will discuss findings with EPA staff during our monthly calls. We appreciate EPA’s comment that considerable progress has been made by the HWP in the program area of penalty calculation, assessment, collection and documentation.

RCRA Element 5 – Penalties – Area for State Improvement

Summary – EPA stated that the documentation of the difference between the initial and final penalty is not consistently documented in the program files.

State response – EPA recommends that HWP revise its standard penalty calculation and documentation format to include a specific section for penalty reduction justification to ensure that this information is consistently documented. EPA further requested that MDNR submit a revised penalty sheet for EPA review within 90 days of the final report date which it will use to close this finding. The program agrees to provide a format for documenting penalty close-out decisions within the timeframe requested.

Thank you for the opportunity to provide comments to the draft report and we look forward to working with your staff to accomplish these improvements.

Sincerely,

HAZARDOUS WASTE PROGRAM



Steve Sturgess
Director

SS:kfh

c: Mr. Mark Runyon, Internal Audit Director, Missouri
Department of Natural Resources